RESI RCH BRIEF OF FINAL REPORT
MEDICAID BA. C AND OPTIONAL SERVICES:
IMPACT [illegible] R 74

Medicaid Eval

RESEARCH BRIEF

OF

FINAL REPORT

Medicaid Basic and Optional Services: Impact on the Poor

Prepared at Temple University of the
Commonwealth System of Higher Education
Philadelphia, Pennsylvania 19122

October 1974

*This investigation was supported, in part, by Research Grant No. SRS 18P 56701/3-01 from the Division of Research and Demonstration Grants, Social and Rehabilitation Service, Department of Health, Education and Welfare, Washington, D.C. 20201.

REPORTS
RA
412
.4
H34
1974

RA
412.4
.H34
1974

FINAL REPORT

Medicaid Basic and Optional Services: Impact on the Poor

Project Director: Charles P. Hall, Jr., Ph.D.
Professor and Chairman
Department of Health Administration
School of Business Administration
Temple University
Philadelphia, Pennsylvania 19122

Co-investigators: James C. Alden, M.D.
Michael L. Dolfman, Ph.D.
John A. Flueck, Ph.D.
William F. McKenna, M.B.A.
Jerry S. Rosenbloom, Ph.D.
William H. Wandel, Ph.D.

October 1974

*This investigation was supported, in part, by Research Grant No. SRS 18P 56701/3-01 from the Division of Research and Demonstration Grants, Social and Rehabilitation Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

Significant Findings

1. Utilization data for the various health services studied tend to follow predictable patterns by age, welfare category and type of service (pp. 179; 180).

2. Sharp differences in utilization tend to exist, for most services, between the three adult welfare categories studied and the AFDC children (pp. 179; 180).

3. Substantial utilization differences exist between the cities studied. These differences, in addition to being related to the availability of coverage, seem directly related to the availability of health care personnel/facilities (p. 180).

4. In general, utilization was higher among whites than blacks for most health services, a tendency that was especially pronounced among AFDC children (p. 180).

5. Further study is needed to investigate the impact of high utilization of health services among white AFDC children on use of services among adult welfare categories (i.e., are the youth services largely diagnostic/preventive, and does this result in lower adult needs? p. 180).

6. Interracial differences in utilization of health services appear to reflect a variety of sociological factors, e.g., housing patterns (p. 180).

7. A broad benefit package tends to have a cumulative effect on utilization of health services, e.g., in two cities with some common benefits, utilization tends to be higher across-the-board in the city with the broadest total benefit package (an induced demand effect, pp. 180, 182).

8. The relative effect of regional differences in medical practice and demographic characteristics (e.g., education, average income) on the use of health care services versus the impact of benefit availability needs more study (p. 182).

9. Interracial differences in utilization tend to change significantly when full coverage is available (p. 182).

10. Use of Medicaid services may have been influenced in a variety of ways by the Civil Rights movement of the past decade as well as by long standing employment patterns (p. 182).

11. Proportionally more poor whites than blacks incur out-of-pocket expenses for their medical services, implying that they more frequently seek their care outside of the Medicaid system. This is confirmed, in part, by the fact that proportionally more whites than blacks receive their

treatment from private physicians, while proportionally more blacks use hospital emergency rooms (p. 182).

12. Though not overtly supported by the results of the main survey, the substitution hypothesis was endorsed by the physicians who were surveyed, suggesting that further investigation under controlled conditions is in order (p. 184).

13. More study is clearly indicated to determine the relationships between urban-rural use of health care services. Some indication exists that the differences are substantial and not always in the expected direction for certain services (p. 184).

14. Unmet needs, as perceived by Medicaid eligibles, tended to be directly related to age/aid category and Medicaid coverage patterns (p. 184).

15. Health status, though showing some slight correlation with available health benefits and services, appears to be influenced more significantly by other factors; furthermore, Medicaid eligibles seem to recognize that health care services alone are not the only determinant of health status (p. 186).

16. The induced demand and other potential economic side effects apparently associated with broad-based government sponsored health benefits programs should be carefully evaluated before enacting additional health legislation, e.g., national health insurance (pp. 186, 188).

17. Despite widespread agreement as to the importance of prescription drug coverage, our survey results suggest that this should not be the top priority item in planning future legislation. Because our results conflict with the "conventional wisdom," further investigation is warranted before policy is set (p. 188).

TABLE OF CONTENTS

Chapter		Page
	Significant Findings	i
	Preface and Acknowledgement	vi
	Abstract	vii
	Index Terms Assigned	viii
1	Introduction	1
2	Design and Methodology	9
3	A Profile of the Health Care Behavior Patterns of Atlanta Public Assistance Recipients	21
4	A Profile of the Health Care Behavior Patterns of Little Rock Public Assistance Recipients	48
5	A Profile of the Health Care Behavior Patterns of Oklahoma City Public Assistance Recipients	70
6	A Profile of the Health Care Behavior Patterns of Trenton Public Assistance Recipients	93
7	Intercity Comparisons	113
8	The Arkansas E.H.S.D.S. Health Survey	157
9	County Welfare Administrators' Survey	164
10	The Physician Survey	172
11	Summary and Conclusions	179
Appendix A,	Part I, The Main Survey	190
	Part II, The Arkansas EHSDS Survey	225
	Part III, County Welfare Administrators' Survey	238
	Part IV, Oklahoma Physician Survey	246

Page

Appendix B, Part I, Response Rates, Main Survey 257
Part II, Underreporting in the Arkansas ESHDS Study . . 264

Appendix C, Significance Testing. 269

Appendix D, Reliability Study 273

Appendix E, Validity Study. 282

Preface and Acknowledgements

The study which served as the basis for this report was initiated in response to an RFP from the Social and Rehabilitation Service of DHEW. The funding period was from July 1, 1972 through July 31, 1974, and the full title was "The Effects on the Medicaid Program in Terms of Health Status, Utilization and Costs Where Various Optional Services Are Not Covered Under State Plans."

The topic is a timely one, in light of the widespread dissatisfaction with existing health care organization and financing in this country and the various initiatives to bring about change. Potential policy implications drawn from the study go well beyond the Medicaid program, possibly extending specifically to proposals for national health insurance and other reforms in organization.

The primary authors of the final report in addition to the project director, are John A. Flueck, Associate Professor of Statistics and Director of the Data Analysis Laboratory, the project statistician, and William F. McKenna, Research Associate, the only person who devoted full-time to the project for its entire duration. The other professional staff, Drs. Alden, Dolfman, Rosenbloom and Wandel, were all heavily involved in the design stage, and also participated, to varying degrees, in the analysis of the data. A number of graduate student research assistants were involved in the project: I. Chung Hung, Donald Johnson, Gaston Mendoza, Donald McNulty, Stephen Robbins, Michael Rosko, Steven Sorin, Frank Tidikis and Sandra Wentzel. Mr. Hung in particular, was invaluable as the person responsible for much of our computer programming under the direction of Dr. Flueck. Other supporting personnel included Mrs. Dorothy Stent, who served as project secretary during the first eighteen months, and Mrs. Grace Tappert, who typed the entire final report. The Temple University Computer Activities Center provided invaluable technical assistance and ran all computer analyses. Dean Seymour Wolfbein of the School of Business Administration and Dr. Gerhard Spiegler, Academic Vice President, also provided some needed supplementary financial support during the later stages of the project. The conduct of field interviews and construction of the original database was subcontracted to Marketing Information Service, Inc., of Atlanta, Georgia, under the able direction of Mr. John Massey, and the expert assistance of Gina Guaraldi and Michael Hardin.

In addition, we are indebted to the state, county and local Welfare and Medicaid officials in the four main survey sites for their generous cooperation. Also our thanks to the several agencies in Arkansas which cooperated with us in connection with the E.H.S.D.S. sponsored Arkansas Health Survey.

Naturally, any errors in the final report are the responsibility of the project director.

Charles P. Hall, Jr.
Philadelphia, October 1974

Abstract

The goals of this study were to determine the amount and types of medical services used by Medicaid eligibles as well as where the services were obtained and how they were paid for. In addition, the "utilization" effects of optional services and the perceived level of unmet needs and health status of eligibles were examined.

The investigation was based, primarily, on an extensive household survey conducted for over 3,000 cases (over 8,000 individuals) in four locations--Atlanta, Georgia; Little Rock, Arkansas; Oklahoma City, Oklahoma; and Trenton, New Jersey. The sites were chosen to reflect various packages of Medicaid benefits.

Results reveal that coverage of optional services, in most instances, significantly influences the use of specific health services as well as the level of unmet needs and, to a lesser degree, health status. The study also revealed marked interracial differences among eligibles as to the level of use of health services, the source of payment for services and other related variables. While some common sense explanations for variations among various welfare categories, age and racial groups have been supported, the results also identify some important areas deserving further investigation.

Finally, some potentially significant policy implications are identified for those concerned with improving health care delivery either through modifications in Medicaid or the introduction of some form of national health insurance.

Index Terms Assigned

AFDC, attitudes, availability, benefits, birth, chronic, drugs, eligibility, ethnic groups, family planning, financial assistance, field, glasses, health delivery system, health status, health services, hearing aid, hearing care, home health care, hospitalization, illness costs insurance, medical care, needs, non-chronic, older adults, optical aids, out-of-pocket, physician, prosthetics, research, transportation, vision, utilization, welfare.

CHAPTER 1

INTRODUCTION

Background--Medicaid

Title XIX of the Social Security Act, popularly known as Medicaid, became effective January 1, 1966. Its primary objective was to encourage the establishment by individual states of unified medical assistance programs with a common content of care for everyone receiving federally aided money payments under any of the categorical public assistance programs. From the beginning participating states were required to provide at least a basic set of mandatory benefits but the long-term goal was to encourage states to work toward liberalizing eligibility standards and expanding the content of care with a view to providing, originally by July 1975, comprehensive services for substantially all individuals who meet the state plan's financial eligibility standards. By 1970 there were 52 Medicaid programs in operation in the District of Columbia, Guam, Puerto Rico, the Virgin Islands and all states except Alaska and Arizona. The last state to participate, Arizona, enacted its law in late spring, 1974, for implementation in 1975.

In 1969 the comprehensive care target date was postponed to 1977 and states were relieved until 1971 of the requirement that they show progress toward meeting the goal.

Medicaid, like the public assistance programs for maintenance assistance, operates through state programs based on plans submitted by each state and approved by the federal agency as meeting the requirements of federal law and policy. Although certain prohibitions apply to all states (e.g., with respect to a durational residence requirement or a requirement of a lien against the property of an eligible recipient), considerable variation is permitted from state to state in both eligibility and services.

Originally, the minimum requirement was that all cash welfare recipients under categorical public assistance programs had to be eligible. This included Old Age Assistance (OAA), Aid to the Blind (AB), Aid to the Permanently and Totally Disabled (APTD), and Aid to Families with Dependent Children (AFDC). In some states, the first three of these programs were combined into one--Aid to the Aged, Blind or Disabled (AABD). On January 1, 1974, this was further modified by the implementation of the Supplementary Security Income (SSI) program, but this came after the collection of data under this study. In addition to the categorically needy, a state could opt to serve the "medically needy," that is, those found by the application of state standards to have income and resources exceeding those necessary for financial maintenance assistance but insufficient to meet the costs of medical care. This latter category of Medicaid eligibles was not investigated in this study.

Of the kinds of medical care for which federal financial participation could be received, those required of all Medicaid programs at the time of this study (January-August, 1973) were:

1. Inpatient hospital services (other than those in an institution for tuberculosis or mental diseases);
2. Outpatient hospital services;
3. Other laboratory and X-ray services;
4. Skilled nursing home services (other than services in an institution for tuberculosis or mental diseases) for individuals age 21 or older;
5. Physicians' services, wherever performed;
6. Early and periodic screening and diagnosis of individuals under age 21, and care, treatment and other measures to correct or ameliorate defects and chronic conditions discovered thereby;
7. Home health care services for those entitled to skilled nursing home services;
8. Transportation to and from medical services.

The optional services included principally clinic (other than hospital) services, prosthetic devices, dental care, eyeglasses, prescriptions, private duty nursing, physical therapy and related services, other diagnostic, screening, preventive and rehabilitation services, emergency hospital services, family planning services, skilled nursing home services for patients under 21, optometrist's services, podiatrist's services, chiropractor's services, care for patients 65 or older in institutions for mental diseases, care for patients 65 or older in institutions for tuberculosis, and institutional services in intermediate care facilities.

The total content of care covered by the state programs varies widely from state to state. A few states limit the program to mandatory services; other states provide the whole range of services permissible under the federal law. Perhaps of special significance has been the failure of 15-20 states, as late as July 1, 1971, to provide for dental services or for eyeglasses, both of which may be relatively high cost items in the medical care budget of assistance cases. The coverage of prescribed drugs, so intimately related to health, was not provided at that time in the six jurisdictions of Arkansas, Idaho, Oklahoma, South Dakota, Texas or Wyoming. The diversity results from several factors, including the ability of the respective states to provide the matching dollars as well as different perceptions of need by their legislatures as they take advantage of federal cost sharing.

Concern of the Social and Rehabilitation Service (SRS)

There has been little in-depth research into the impact on the poor of the failure of some states to provide optional services. The significance of the omission of optional services under medical assistance programs on the accessibility and use of medical services has, at the same time, been a matter of deep concern to federal authorities. This concern has been both with the effect of the omissions on the receipt of medical services not covered by the state program and the effect of the omissions on the complete range of medical services for which Medicaid eligibles have a perceived need. Knowledge gained from measurements of such effects should be of significant value in the resolution of policy questions affecting future federal and state legislation respecting the scope and content of provisions for making needed medical services accessible to the American people--whether through the Medicaid program for the poor or a national health insurance program for all.

Project Team

As an outgrowth of the concern of SRS, a grant was made to Temple University for a study of "The Effects on the Medicaid Program in Terms of Health Status, Utilization and Costs where Various Optional Services Are Not Covered under State Plans." The original project period of 18 months, starting July 1, 1972, was subsequently extended through July 31, 1974. The project team was responsible for the design of the study; it supervised the field collection (which was subcontracted to Marketing Information Service, Inc., of Atlanta, Georgia) and conducted all analyses of the data.

Purpose of Study

The specific objectives of the study as agreed upon by the sponsor (SRS) and the project team were:

1. Primary objectives are to determine
   a. the proportion of Medicaid eligibles who are receiving health care services;
   b. what specific services are used;
   c. where the services are received, i.e., from what type of provider;
   d. how and by whom they are paid.

2. The secondary objectives are to determine
   a. the so-called "utilization effects," i.e., whether they were obtained through the substitution of one of the basic covered services, and to make comparisons between jurisdictions providing different coverages of medical services regarding the proportions of eligibles receiving various health care services;
   b. the proportion of eligibles who have perceived a need for health care services but who did not receive them and to ascertain the reason(s) why they did not receive them.

3. The tertiary objective was to determine, to the extent that it is possible, the health status of the eligibles.

Program of Study

From the outset, the project team felt that secondary sources of the experience of Medicaid eligibles--the records of the state agencies reflecting utilization of covered services, the providers of those services and the cost of the services, and the office records of providers themselves--would be unsatisfactory and incomplete in many respects in comparison with direct contact with eligibles. This would be particularly true with respect to the determination of unmet needs, since these would never be reflected in official records; furthermore, even where services had been used, it was found that the paid claims tapes were often inaccurate. This could result from slow reporting by some providers, lack of sufficient detail, and data processing errors. In addition, they could provide no information on utilization and expenditures by eligibles outside of the Medicaid system. Thus the study needed to encompass inquiry into the whole range of medical services utilized by eligibles, including those not paid for by a Medicaid program. It was also important to gauge the perception by Medicaid eligibles of the need for noncovered services.

This focus on Medicaid eligibles is important. Other studies have examined Medicaid recipients and have relied heavily on paid claims tapes for information. But this deals only with persons who have entered and been served by the system. By dealing with eligibles, i.e. each welfare recipient,* it is possible to address the broader issues stated in the objectives, i.e. what proportion of Medicaid eligibles are receiving health care services. This permits other kinds of judgments, e.g. how well informed are the poor about programs for which they are eligible?

With respect to optional services, the objective was to compare the use, locus of receipt, method of payment, and mix of services--as well as the perceived health status of eligibles--between sites that did and did not provide coverage for selected optional services. In particular, it was felt important to see if any clear pattern of substitution of covered for noncovered services might exist. (For example, might more frequent physician visits occur in an area where prescriptions are not covered?)

Where noncovered medical services are utilized, the ways and means by which these services are secured needed to be determined and judged according to their adequacy in meeting the perceived needs for these services. The alternative resources to be identified were both public (non-Title XIX) and private (charitable foundations, churches, service clubs, etc.) How the services were paid for was also considered to be of importance, i.e., if they rested on governmental (non-Title XIX) appropriations, support of private organizations, the free service rendered by providers of medical care, by private insurance, or, most importantly, by the user's own resources.

With respect to the last, namely, the drain on the individual's own resources, an attempt had to be made to determine the amount of the expenditures made "out-of-pocket" for specific medical services, recognizing that out-of-pocket payments may be made for services covered by the Medicaid program as well as for those not covered. In view of the low economic status of the population to be studied, it did not seem to be productive to pursue the question of the impact on savings or other resources.

The aim of determining the effect on health status of the individual, a tertiary objective of the study, could, within the limitations of the study's resources, be approached only in terms of the perceptions of the Medicaid eligibles. However, implications could be drawn from the failure to receive specific needed services as well as from general assessments of the health status of individual members of families of Medicaid eligibles.

Aside from pursuing the purposes of the study through a field survey of families and individuals eligible for Medicaid (the main study), it seemed worthwhile to supplement the main survey by approaching those presumably most familiar with the effects of the failure of a state to incorporate optional services in its Medicaid program, namely, welfare administrators and physicians who serve Medicaid patients. This approach was implemented via two mini-mail surveys which are separately reported in Chapters VIII and IX.

---

*it is important to note that "eligibles" do not include those individuals who have met the Medicaid eligibility standards but have not registered for public assistance benefits.

In addition, in order to give at least some greater breadth to the study, including a highly desirable rural input, it was arranged to have a subset of the main study's questions incorporated in the survey of the Experimental Health Services Delivery System (EHSDS) study sponsored by the Arkansas Health Systems Foundation. This is reported in Chapter X.

While not all steps in the conduct of the study were taken discreetly in sequence, the general distinct phases of the study can be identified.

After the groundwork of clarifying the objectives of the study and determining the principal approaches to be used in the conduct of the study, the first step was to identify the areas of optional services which were, or had a right to be, of chief concern to consumers of medical services and services to the Medicaid population. From an examination of the literature in the field of health care in general, and of studies of unmet needs for particular services, with special reference to that part of the population having the characteristics of the Medicaid population, it was concluded that the principal areas of concern were those of drugs, eye care, and dental care.

Most of the states which have only limited, if any, coverage of optional services provide them only for the categorically needy; the inability to identify the medically needy before a claim is submitted resulted in a decision to omit this group from our survey population. A further decision was to exclude institutionalized categorically needy eligibles who, for the most part, are elderly people in nursing homes. Among the four categorical public assistance programs, the recipients of Aid to the Blind (AB) were also excluded merely because they constitute a very small percentage of the number of recipients.

The next step was the selection of sites in which the field studies should be made. States in which one or more of the principal optional services were not provided were identified; the list was then narrowed to those states having sufficient population density or concentrations to make field studies feasible at a reasonable cost per interview. Associated with this preliminary analysis was the decision to have the field work done only in large population centers. It was recognized that experience in these centers would not necessarily be representative of the state as a whole, but this does not preclude some inferences about regional differences. Furthermore, the problems of control, supervision and cost of using broader geographical areas were formidable.

A major objective was to select as survey sites cities with a spectrum of covered Medicaid services ranging from very limited to near-complete. While it was felt that some geographical spread would be desirable, it was found that most of the states with limited Medicaid programs were, in fact, concentrated in the South and Southwest. Full coverage states were typically found in the Northeast.

A preliminary selection was made of the sites of Atlanta, Ga.; Little Rock, Ark.; Oklahoma City, Okla.; and Trenton, N.J.

Visits were then made to these sites to determine (1) the receptivity to and willingness to cooperate in the study by the state and local Medicaid officials and staff; (2) the state and accessibility of the state agency's records on current cash recipients in the Public Assistance categories, including current addresses, family size, payments for services provided to them, classification of services and the providers thereof; and (3) the extent to which there were alternative resources locally accessible by which the Medicaid eligibles could obtain uncovered optional services and an identification of the nature of such resources. In the process of review, more precise geographical boundaries were drawn for each site, based partly on the relationship of the distribution of population to the center of population and partly on the way the state records were set up by county.

This investigation of sites produced sufficiently promising results that the initial selection of sites became the final choice.

A sampling procedure was developed which utilized stratification of the eligible population and allocation of sample observations proportionate to size in each site. Most importantly, the stratification and proportional allocation objectives were to assure adequate distribution of the AFDC eligibles by size of family and race and the OAA population by age and race.

As work began on the preparation of the questionnaire to be used in the field interviews, a search was initiated for a survey research organization to conduct the field interviews and tabulate the results. It was necessary to find an organization with the staff, equipment and skills competent for this undertaking. In addition, it was necessary to assure that the organization had a grasp of the essential character and objectives of the study, and had the capacity for high quality performance in assisting in the design of the questionnaire and pretesting it, conducting the survey, editing, coding and verifying the results and preparing some initial cross tabulations of the results.

After screening four survey subcontractors, Marketing Informations Services, Inc. (MIS) was selected and immediately began to work with the project staff on the questionnaire and its format. In addition, under the guidance of the project team, MIS compiled a list of the desired populations based on county eligibility lists.

A pretest of the questionnaire was conducted; for each site 25 cases were chosen for a pretest--a process that took about two weeks and in which members of the Temple staff participated. The pretesting resulted in significant changes in the questionnaire.

The selection of the sample was conducted under the direction of the Temple statistician and resulted in approximately 1,000 eligibles in each of the four cities. Supplementation was needed chiefly due to wrong addresses.

The interviews themselves occupied a period of about three months, in June, July and August, 1973, followed by a checkback by phone or personal interview to confirm, through selected questions, the reliability of the responses to the questionnaire as they were reported by the interviewer (Appendix D).

After assembling the survey database, considerable analyses were performed utilizing both intra and inter site comparisons. All analyses were undertaken from the viewpoint of the data analysis methodology. (See Chapter 2.)

It should be noted that no attempt is made in this report to present in detail all of the data that were collected. Appendix A contains a copy of the full questionnaire. In displaying the interview results, Marketing Information Service, Inc., provided the project team with over 4,000 tables (over 1,000 for each site) which presented the empirical data according to the variables described in Chapter 2. The analyses and tables which appear in this report are all derived from this basic data bank. Naturally, the project team has retained this information, and it hopes to be able to conduct further analysis in the future.

Lastly, any interpretation of the data of the main survey or of its analyses should be contingent on the following points:

1. As indicated above, the Medicaid benefit structure in the four survey locations ranged from very restricted to near total coverage. Details for each site are described at the beginning of the intrasite comparison, Chapters 2-6.*

2. No two states had the same standard for determining eligibility for Public Assistance and Medicaid. Furthermore, administrative procedures affecting initial and continuing entitlement to Medicaid differed from jurisdiction to jurisdiction.

3. Differences between the sites in demographic characteristics--age, sex, race, family composition--impair easy comparison, although the analyses should correct for most of these disparities.

4. The surveys were made at the same time of the year, but climatic conditions differ somewhat between sites; some of this climatic difference may affect the incidence and severity of illness and the need for medical services.

5. There are qualifications that must be placed on a study that is based so largely on the recollections of individuals rather than on records. Evidence on this problem is discussed in Appendix B on Reliability and Validity.

---

*It should be noted that the reference period for the questionnaire covered from January 1, 1972, through the date of the interview--in some cases, as late as August 1973. During this interval some minor changes in coverage of optional services took place in Georgia (Atlanta) on January 1 and July 1, 1973. These changes related only to age limits for screening (diagnosis) and are not considered significant for purposes of this study. Coverage in the other sites remained constant during this period, although subsequent modifications have been introduced in Georgia and Arkansas.

6. Despite misgivings by the project team that the respondent population might be suspicious of, and resist inquiry, or that a lower than average record of school attendance would be reflected in unintelligent answers, these concerns did not seem to be justified. When respondents were contacted, doors were opened, with few exceptions, and intelligent responses (sometimes more fullsome than strictly required) freely given, and considerable interest in the survey was expressed. Appendix B reports on response rates.

CHAPTER 2

DESIGN AND METHODOLOGY

Introduction

Every survey has two basic stages, the design or plan of the survey, and the implementation of this design to provide answers to the questions of interest. This chapter will present in detail the survey design and methodology of the main survey of the study with some accompanying discussion of its implementation. Many of these same points are applicable to the three subsidiary surveys of the study (Chapters VIII-X).

The design of a survey is a more extensive and encompassing undertaking than is generally recognized. There are numerous steps and problems that must be faced and solved if the survey is to succeed. The entire plan or design of the survey should be prepared before the data collection commences.

The following nine essential steps of survey design [1] will be used to present the design of the main survey: (1) the objectives and justification of the survey; (2) the quantification of the desired information; (3) the sample selection process; (4) the data collection; (5) the data reduction; (6) the data summarization and interpretation; (7) the dissemination of results; (8) the pilot study; and (9) the ex-post evaluation of the survey. These steps are in the approximately desired chronological sequence, with the recognition that considerable feedback occurs between them.

The Design of the Main Survey

The Objectives and Justification

Chapter I has already presented the objectives and justification for the main survey. The objectives, as given there, were trichotomized into determining:

1. Primary objectives
    a. the proportion of Medicaid eligibles who are receiving the various health care services (both basic and optional services);
    b. the specific services that are used;
    c. where the services are received;
    d. who and how payment is rendered.

2. Secondary objectives
    a. utilization effects;
    b. unmet needs for health care and why they were unmet.

3. Tertiary objective
    a. the health status of the eligibles.

Thus, information on utilization of health care services, costs, unmet needs, and health status was desired for the Medicaid eligibles who were currently receiving monthly welfare checks in the Local Area's (LA's) of Atlanta, Georgia; Little Rock, Arkansas; Oklahoma City, Oklahoma, and Trenton, New Jersey. These four LA's were purposely selected by the project team and SRS mainly to ensure a spectrum of optional service coverage (see Chapter I) and local agency cooperation in the survey.

Initial research suggested that institutionalized individuals probably have different health care needs and a different delivery system than noninstitutionalized. For this reason, the survey deleted the welfare recipients who were presently institutionalized (mainly nursing and convalescent home patients). Recipients under the Aid to the Blind program were also eliminated because they were small in number and are typically serviced by other specialized programs. Thus, the survey population of interest consisted of the noninstitutionalized cash welfare recipients in the Aid to the Permanently and Totally Disabled (APTD,* Old Age Assistance (OAA), and Aid to Families with Dependent Children (AFDC) programs in each of the four local areas of Atlanta, Little Rock, Oklahoma City, and Trenton.

The Quantification of the Desired Information

One of the initial quantification problems is the precise specification of the population, or populations, of interest. In a general sense, the population of interest is simply the set of elements, or units, about which information is desired. This set is often called the target population and typically exists only as a general prescription. In the main study this target population is the noninstitutionalized cash welfare recipients in three welfare programs (AD, OAA, and AFDC) in four LA's (Atlanta, Little Rock, Oklahoma City, and Trenton).

To move from the prescription of a population to the description of a usable population, a "function" is needed to produce the set of identified sample units, the identified population or the population of sampling units. This function has traditionally been termed the "frame," and it produces a list of potential sample units, the identified population. This population has a date of conception, possible dates of additions and deletions, and should have as large an intersection with (be as "close" to) the target population as time and resources permit. In the main study, the identified population was produced by using the county welfare categorical assistance eligibility file as of March 1973. This resulted in the sampling unit being the welfare case; the Atlanta LA was represented by Fulton County (which was estimated to contain 91% of the Atlanta welfare caseload); Pulaski County (including Little Rock, North Little Rock, College Station, and Jacksonville, Arkansas) represented the Little Rock LA; Oklahoma County (which includes MidWest City, and most of Oklahoma City) represented the Oklahoma City LA; and Mercer County (Trenton, Mercerville, and Princeton) represented the Trenton LA.

---

*For convenience, this program is referenced throughout the rest of this report as Aid to the Disabled (AD).

The population of interest and the identified population, the population that was attempted to be sampled, have been described. However, a third population, the sampled population, is the population that was actually sampled. Like the initial population of interest, this is a prescribed population and is composed of all those sample units in the identified population who could have been successfully interviewed. In short, only those sample units who were willing and who could have been reached are members of the sampled population. Again the interest is in maximizing the intersection between the identified population and the sampled population. In the main study, those welfare cases who were home during the hours of 8:00 A.M. to 10:00 P.M. in June, July, and August, 1973, who had not moved and had a correct address, who had moved and had established a new address, and who had or would have answered any (or the majority) of the questions were members of the sampled population.*

The above hierarchy of populations has been only with respect to the sampling units, welfare cases in this survey. However, the basis interest is in particular characteristics or dimensions of the elementary units, i.e. the age, number of doctor visits, health status, etc., of the eligible individuals in the particular welfare population. Thus, each of the desired dimensions of an individual must be measured (quantified by a variable) with the result that each of the above mentioned populations now have an associated multivariate population of numerical values. Consequently, the survey results in the selection of a sample of these multivariate numerical observations which will be analyzed in an attempt at constructing inferences for the multivariate population and thereby ultimately providing knowledge about the specific objectives of the survey.

The selection of the multiplicity of dimensions of the elementary unit (the eligible individual), upon which quantifications were to be attempted, and the method of measuring these dimensions were problems that were attended to in the construction of the measuring instrument or questionnaire. Questionnaire design is an art which is gradually becoming more of a science. In constructing the questionnaire for the main survey, an attempt was made at obtaining questions that were similar to those successfully utilized by other "health" surveys, such as the National Center for Health Statistics, Health Interview Survey [2].

Considerable attention was given over a three-month period to the construction of the questionnaire. Numerous discussions occurred between the subject-matter members of the project and the project statistician. Topics discussed included the number of optional services to investigate, the selection of the appropriate respondent, the quantity and level of detail of the desired information, the recall period, procedures for maximizing the quality of the data, interviewer bias, the length of the questionnaire, the potential coding problems, etc. The literature on questionnaire construction and response errors was consulted, and rough drafts of the questionnaire were "hot-housed" on university employees and local welfare eligibles. During this period, the survey subcontractor, MIS, worked on the formulation and flow of the questionnaire and, with the Temple project team, conducted a pretest of it using approximately 25 cases in each of the four local areas.

---

*There was an additional restriction on the sampled population in that only those individuals in these cases who were eligible for welfare at some period within the last three months were fully interviewed. Those individuals who stated that they were not eligible in the last three months or who did not know if they had been eligible, were declared ineligible and no interview data was collected beyond the initial demographic and eligibility data.

The major points uncovered by the pretest were that the questionnaire was too lengthy, the flow needed to be improved, some questions needed modification, and more probes were needed. After undergoing considerable revision, the final questionnaire contained a total of approximately 228 questions spread over eleven sections (A. Demographic, B. Eligibility and Health Insurance, C. Overnight Hospitalization, D. Dental Care, E. Eye Care, F. Hearing, G. Physician Services, H. Prescription and Nonprescription Drugs, I. Home Health Care, J. Family Growth and Planning Services, and K. General Health Status). Because of skip patterns and welfare program differences, however, no one was called upon to respond to all questions. Appendix A contains a copy of the final questionnaire used in the main study.

The Sample Selection Process

It is well-known that a number of techniques are available for selecting the sample of elementary units. Basically, the choices can be dichotomized into purposive and probability based sampling, with the latter typically preferred over the former because (1) the technique, when properly applied, is without bias; (2) the reliability or precision of the estimates can be calculated; (3) the variability present in the population is generally better indicated; and (4) the population in all of its multiple aspects is better represented. Both purposive and probability based selection were utilized in this study. As mentioned above, the selection of the four LAs was purposive.

The second stage of the sample design utilized probability-based selection of the welfare cases. However, even within probability-based sampling, a number of types are available. The question of which type to utilize generally depends on what is hoped to be done with the results and what is known *a priori* about the population of interest. In the case of the main survey, previous studies [3] suggested that there tended to be different utilization rates of medical services between various subsets of the U.S. welfare population. Furthermore, SRS desired to gain knowledge about the health care and practices of various subsets of Medicaid users. Lastly, the project team desired to select a sampling technique that guaranteed coverage of a number of subsets of Medicaid users (i.e., elderly, American Indians, large families, etc.) while at the same time attaining effective use of these observations. These requirements led to selection of stratified random sampling with proportional allocation as the appropriate sampling technique. The advantages of this technique over other probability-based sampling procedures are well-known.

The third stage employed 100% sampling of all eligible individuals within the welfare case.

The main study, like many other social service surveys, utilized both *a priori* and *a posteriori* stratification. The *a priori* stratification was conducted on the identified population while the a posteriori stratification (partitioning) was conducted on the collected sample units.

Concern is sometimes expressed on the meaningfulness of formal statistical inferences based on a posteriori partitioning. This is an appropriate question, and from a data analysis viewpoint the fundamental point is simply that as long as the partitioning is based on a variable that is not influenced by the effect being investigated (treatment effect), the classical statistical inferences will be preserved. Even when the partitioning variable is believed to be influenced by the effect being investigated, some researchers still consider the results useful in suggesting or indicating the possible presence of an effect. In this situation, appropriate data analysis would use not only the consistency of the effect over time or space as evidence for its presence in the population, but more importantly, its presence when attempts are made to account for possible confounding.

The selection of the specific a priori stratification variables was largely dictated by the importance of such variables as indicated by past published and unpublished research, the desire to keep the number relatively small, and their availability. The results were that a set of four variables--type of aid program, race, age, and size of family--was selected. Their utilization in all four LAs was as follows:

1. AD classified by the racial categories of white (W), American Indian (AI), black (B), and unclassified (UC);

2. OAA cross-classified by race (W, AI B, UC) and age (65 through 74, 75 and above);

3. AFDC cross-classified by race (W, AI, B UC) and family size (three or less, four or more).

For prestratification purposes, the above variables were based on welfare agency classification; the AI category was only used in Oklahoma City, and the UC category only in Little Rock. The reason for the UC classification was that a federal directive had been issued that called for the elimination of classification by race. Little Rock was the only site that had implemented this new policy to any significant degree.

The final item attended to in this step was the desired sample size and the associated question of precision (variance) of the estimators. As is well-known, the larger the sample size, the greater is the cost and the greater, generally, is the precision (smaller the variance). Hence, the tradeoff is between the cost of the observations and the variance of the utilized estimators. However, a number of subpopulations (e.g. OAA-white-greater than 75 years old) were of interest, with the result that the question of sample size, precision and cost became somewhat complex. The final resolution was a desired 1,000 completed interviews in each LA.

The survey contractor suggested that an 80% response rate seemed possible based on his prior experience in marketing research. Although the project team felt this estimate to be somewhat optimistic, it was employed in establishing the sample size at 1,250 welfare cases for each of the four LAs.* The resulting sample sizes, using stratified random sampling with proportional allocation, are given for each of the four LAs in Appendix B. Note that the sampling rates vary from a low of .04 in Atlanta to a high of .16 in Trenton.

---

*Oklahoma City and Trenton have 1,254 and 1,253 respectively because of a few discovered duplicate cases.

The actual selection of the subsample from each of the 50 identified subpopulations (10 in Atlanta and Trenton and 15 in both Little Rock and Oklahoma City) was performed on the respective eligibility lists after they had been printed and purged of nursing home, convalescent home, and out-of-county cases. Systematic selection, utilizing a random start and the calculated sampling rate, was used to designate the cases to be sampled.

The Data Collection

The data collection step of a survey has been fairly well standardized with many practitioners following the procedures established many years ago by the Bureau of the Census and others. The goal of this step is to collect, or access, the entire set of the desired data under conditions and procedures that will assure high quality data unadulterated by the collection process.

The main survey attempted to achieve these ends by utilizing a field-conducted household survey performed by the survey subcontractor, MIS, with some guidance from the project team. MIS had field offices and experienced interviewers in each of the four LAs. Nevertheless, additional interviewers were hired and trained for the survey, with the result that at each site there was a spectrum of interviewers ranging from highly experienced to novice.

All interviewers were processed through a one-day training session and given a printed set of interviewer instructions, with novice interviewers receiving closer supervision in their initial field work. All interviewers were paid an hourly rate, with Trenton adding a bonus scheme. The racial and sex composition of the interviewers varied, with Trenton having black, white and Spanish-speaking interviewers, most college-aged males, while Oklahoma City had mainly white females of middle forties and fifties and college age. The supervisors were all experienced survey field personnel, and contrary to expectation both supervisors and interviewers reported no unusual problems in interviewing members of this selected welfare population. This point is supported by the overall response rates in Appendix B.

The main survey was in the field for the months of June, July and August, with the majority of the interviewing conducted between 8:30 A.M. and 4:30 P.M. on weekdays. Interviewers were requested to seek an interview environment that permitted the respondent, or respondents, to give undivided attention to the questions of the interview. Up to three callbacks (subsequent visits to the interviewee's address) were utilized before a case was terminated, with evening (7:00 P.M. to 10:00 P.M.) callbacks being frequently used.

The designation of the appropriate observational unit, or respondent as they are often termed in an interview survey, is an important task in the data collection process. Numerous studies have suggested that one generally obtains better information from the elementary unit (the particular welfare eligible) than from a substitute respondent.* However, there is a tradeoff between quality and cost, in that the more restrictive one is on the designation of the observational unit, the lower is the chance of this person being present at any one interview call. This increases the number of callbacks, and hence, the cost needed to secure the desired information.

---

*The observational unit more appropriately should be termed the responder and the group of elementary units, for which the responder provides data, the respondents.

In the main study, the desired respondent, or respondents, varied with the case. The following respondent priorities were used in hopes of attaining the highest quality data given the survey cost constraints.

1. AD and OAA
   a. the designated eligible on the title page of the questionnaire;
   b. spouse, knowledgeable relative, or caretaker if the eligible is unable (due to age, disability) to meaningfully respond.

2. AFDC
   a. family head;
   b. knowledgeable family member.

Also, regardless of the desired respondent's classification, all interviews encouraged the use of multiple respondents.

Initial demographic data (names, ages, relationships, sex, welfare eligibility, etc.) were collected for each member of the household (Sections A and B of the questionnaire); only data on "eligibles" was collected for all other sections of the questionnaire. "Eligibles" were defined as those listed on the Medicaid card, which was asked for by the interviewer, or those designated as eligible by the respondent.

The usual field problems of "no one at home," "vacant dwelling," "refusals," "incomplete interview," "invalid address," "deceased," etc., were encountered, and Appendix B presents the frequency of their occurrence in each LA. Two of these problems, "invalid address" and "ineligible for welfare," had considerably higher frequencies in most of the LAs than anticipated. Invalid addresses were either returned to the county welfare office for resolution or neighbors were solicited for the "new" or "correct" address. The field experience suggested that agency eligibility files were not always receiving the file maintenance attention they needed.

Appendix B also presents the main survey's overall response rates for each of the four LAs and the associate individual rates for each a priori stratum. The overall response rates ranged from 76% for Oklahoma City to 86% for Little Rock and Trenton, with most individual stratum rates well above 75%. Only the American Indian (AI) a priori stratum seemed to present a persistent interview completion problem.

After the interview was designated as completed by the interviewer, a number of checks and studies were made on the quality of the collected data, including a field edit, home-office edits, an acknowledgement of the interview, a 10% reinterview study, and a validity study. The acknowledgement of an interview is becoming a standard survey procedure and typically takes the form of a return postage-guaranteed postcard which is sent to the indicated interviewee by the home office of the survey.

In the main study, the acknowledgement of an interview was a brief letter that also contained two questions from the main survey--one demographic, and one on doctor visits in 1973. The hope was that with these two questions one would get a more substantial indication of the presence of an interview than with the traditional yes-no question. Unfortunately, this approach was not particularly successful, for the return rates did not exceed 25%.

The Data Reduction

This step in the design of a survey is too often given only cursory attention prior to the survey's initiation, with the typical result that the bottleneck of the survey forms here. The data reduction step entails the editing, coding, and creation of the survey database. The editing process is undertaken in order to detect any errors and omissions in the questionnaire, to correct them, and to prepare the questionnaire for tabulation. In short, it is a cleaning and preparation stage. The coding process is simply the classification and numeralizing of the schedule's data, while the construction of the database is the assemblage of the data on punched cards or magnetic tape or some other data storage form.

The editing process for field interviews usually involves four types of editing: field, intake or initial office, detailed, and check. In the main survey the field edit was handled by the field supervisor who perused each questionnaire to check for completeness, consistency, legibility, and the correct respondent.

The intake or initial office edit is conducted immediately after the field edit so that any problems can be referred to the field staff while the survey is still in the field. It is the last "on-line" edit and is focused on assuring that all of the required data is present and legible. In the main study this was conducted at the MIS home office as the schedules arrived from the field office. Supplementary interviewer instructions, when needed, were generally issued as a result of this edit.

The detailed edit is, as indicated, a thorough examination of each entry in the schedule to assure consistency, uniformity, and accuracy of the information and to properly arrange it for coding and tabulation. This edit it typically done "off-line," follows a detailed set of instructions, and any questions are resolved without returning to the interviewer or interviewee. The main survey followed this course.

The check edit is a procedure used to "check the checkers." It is generally performed on a portion of the schedules that have cleared the detailed edit and is used as a quality control check on the results of the detailed edit. The main survey performed this edit on approximately 10% of the completely edited schedules.

The coding procedure is analogous to a computer language compiler. It starts with the construction of a "coding manual" and terminates with numerals or symbols orderly assigned to each answer in the questionnaire.

Three stages were employed in the coding of the main survey's data. First, all of the questions for each eligible person within a questionnaire were coded. Second, the entire questionnaire was reviewed by a second coder for accuracy and completeness. Third, the codes for each eligible individual were transferred to a set of six scanning sheets, one sheet per punched card.

Lastly, the survey data file was constructed by keypunching, initially manually and later by machine, the survey's coded data for each case onto a set of cards. Verification was performed and then a magnetic tape of these card images was constructed.

The Data Summarization and Interpretation

The previous steps result in the creation of the survey database. This database is multidimensional (multivariate), contains the entire set of raw numerical data generated by the survey, and may be exceedingly large, thereby requiring special information science techniques to manipulate it. In the main survey the database was stored on eight magnetic tapes, two tapes (OAA-AD, AFDC) for each local area.

Given the database, the interest of the researcher naturally returns to the goals of the survey and to the desire for answers to both specific questions that helped to frame the goals of the survey as well as questions that have arisen from other steps in the design, the implementation, or subsequent analyses of the survey data. In this regard, the often-repeated suggestion of completely laying out all tabulation tables prior to implementing the survey has merit. It forces the researcher to clearly specify what quantitative questions he presently desires to have answered by the survey.

The questions of interest that arise during the design phase of the survey can be formulated as standard statistical questions and approached by classical estimation or testing techniques. In this situation, the techniques that comprise the statistical topic, Experimental Design, should be directly applicable.

However, one does not usually formally anticipate all possible relevant questions or uses of a collected database prior to the implementation of the survey. As such, it is most important to plan for the analysis of the survey database in a manner which will allow subsequent questions to be meaningfully investigated in an interactive and open-ended fashion, and thus maximize the opportunity to gain information on the underlying structure and relationships present in the population of interest. Survey researchers have historically analyzed survey data in this manner, and now the methodology of Data Analysis [4] has formalized this approach.

All of the surveys in this study have taken the Data Analysis approach to analyzing and interpreting the survey data. As such, Significance Testing, as opposed to Hypothesis Testing, has been used where formal testing is desired, and Appendix C presents a brief review of this approach including the use of the "P value" for reporting results. In keeping with the Data Analysis viewpoint, tabular display of the data has been emphasized throughout the report.

Where formal statistical comparisons were made between two a priori stratum (e.g., white vs. black AD), the standard technique for the comparison of two quantities was utilized without correcting for the finite population.* As such the results are conservative. For the major conclusions, where two quantities were compared for more than one a priori stratum (e.g., male vs. female) the appropriate stratified sampling variance was utilized [5]. These same points hold for presentation of single quantity results also. Chapters 3-7 present the implementations and results from these analysis plans.

The Dissemination of the Results

This step returns the survey design to reexamining the first step, the objectives and justification. In the first step the questions were: what is the information requested, who requested it, and what are the benefits and cost? As such, the party or parties of direct interest should have been identified and the initial dissemination of the results should be directed to them. However, the form of the dissemination (i.e., a printed final report, verbal presentations at professional meetings, a magnetic tape of summary results, a journal article, etc.), the contents of the dissemination (i.e., just the main results, tables of all results, the entire database, etc.), the cost, and the overall time schedule of the entire survey must also be examined. A survey that produces results which are not disseminated or are disseminated when results are no longer of interest is of little value.

In the main survey the contract with SRS required that a final report volume be printed. In addition a number of papers will be presented to professional meetings and various journal articles will be developed. The database has been retained on eight magnetic tapes by the project team, and in addition tabulations for each question of the survey have been provided to the sponsor, SRS, and retained by the project team.

In view of continuing economic and social problems, proposals for welfare reform and discussion of national health insurance proposals, the timeliness of the study can hardly be questioned.

The Pilot Study

After the entire survey has been preliminarily designed, the question of how well it will work must be addressed. In short, a pilot test or study of the survey is generally needed before the entire survey is launched. All of the previous steps in the survey design should be "road-tested" before the survey goes to the implementation stage. It is during and after this pilot survey that the final design of the survey is consummated.

The environment of the pilot survey should be as close to the expected environment as possible. In this regard, a sufficient sample size is needed in order to achieve some indication of the types of interview, data reduction, analysis, etc., problems that might arise. Obviously, a pretest of the questionnaire forms only a part of the pilot study.

---

*All analyses are based on the number of eligible individuals and not on the number of cases. Appendix B provides further discussion on this point.

The main survey did not mount a full pilot study, relying instead on a pretest in all four LAs of the questinnaire. As mentioned earlier, this pretest led to considerable revision of the questionnaire plus some reexamination of the appropriate respondent, the potential coding, and the field organization. One might claim that where an existing experienced survey organization is handling the survey, the full pilot study may not be as important as when a "one-time" organization is assembled for the task.

The Ex-Post Evaluation

Two of the questions that every surveyor should ask of his product are, "Would I expect to get similar results if I repeated the survey," and "how close to the 'true' situation are my survey results?" Although these questions can never be definitely answered, one should strive to obtain evidence on these two vital points, for they go to the very heart of the quality of the survey data and its results. The reliability and validity checks, or studies, attempt to answer these two points and are vital procedures for improving the design and implementation of subsequent surveys.

The reliability study investigates the consistency of the survey results. In short, would one obtain the same results if the survey were rerun? This study is often handled by reinterviewing a subset of the respondents using a number of the "key" questions from the questionnaire after a short lapse of time. A single question, in two different forms, is sometimes tested for reliability by the split-questionnaire technique. Half of a group of randomly selected respondents are given one version and the other half the second version, and the resulting responses are compared. At times, the two forms of the question are placed on the same questionnaire with their order of appearance alternated 50-50.

In the main survey, a separate reliability study was conducted by reinterviewing 10% of the respondents in each LA using eleven important questions from the questionnaire. These reinterviews were typically conducted by the most "senior" interviewers within a week or two of the original interview. Appendix D presents the results of this study.

The validity study is directed at the accuracy of the collected data and its results. The quest is for evidence on how well the survey results describe the "true," or population characteristics. Comparisons of the survey results with other survey results, relevant records, subsequent behavior, expert judgment, and plain common sense are all utilized in this process. One may even design the survey such that respondents are urged or required to check their personal records in answering the survey.

A validity study was conducted in the main survey relying largely on the "paid-claims tapes" secured from three of the LAs (they were unavailable to the project team in Atlanta). Appendix E presents these results.

A third ex-post study that is often undertaken is the study of nonrespondents. The central question is whether the nonrespondents' responses would be similar to the respondents' responses or different. If similar, then the survey's results can be meaningfully utilized to make inferences for the entire population. If not, then the results are only applicable to a smaller subset of the population, i.e. only those willing to respond.

However, when the response rates are rather high (possibly 80% and above), the surveyor generally is less concerned about the inference problem. At worst, he believes that he has results that correctly apply to most of the population, and considers this to be substantial in its own right. At best, nonrespondents are generally similar to the survey's respondents and thus the inference problem vanishes.

The main study, as indicated earlier, did attain relatively high response rates in most situations, and thus a separate study of the nonrespondents was not undertaken. However, it should be noted that the nonresponse rates for one of the *a priori* stratification groups (the American Indians) were not very high, and hence the survey findings may not adequately represent their health care patterns and needs.

References

[1] Flueck, John A., "The Essential Steps of Survey Design," memorandum to J. Shiskin, Chief Government Statistician, Office of Statistical Policy, Office of Management and Budget, EOP, November 1970.

[2] HEW, *Health Survey Procedure: Concepts, Questionnaire Development and Definitions in the Health Interview Survey*, NCHS, Series 1, No. 2, May 1964.

[3] *Effect of Medicaid on Health Care of Low-Income Persons*, School of Public Health and Administrative Medicine, Columbia University, New York, Contracts WA-406, SRS-ORDT-68-01 and SRS-69-50.

[4] Mosteller and Tukey, "Data Analysis Including Statistics," *Revised Handbook of Social Psychology*, G. Lindzey and E. Aronson, eds., Addison-Wesley, 1968.

[5] Cochran, William G., *Sampling Techniques*, 2d ed., Wiley & Sons, 1963.

CHAPTER 3

A PROFILE OF THE HEALTH CARE BEHAVIOR PATTERNS OF ATLANTA PUBLIC ASSISTANCE RECIPIENTS

The Setting

At the time of the survey, the Georgia Medicaid program covered prescribed medications but did not cover either dental care, glasses, optometric care, or hearing aids for eligibles over age 5.* The latter group of services were provided for children up to 5 years of age through the screening program. There were no limitations on the number of physician visits to which any eligible was entitled. Physicians were reimbursed on the basis of usual and customary fees and there were no cost-sharing provisions. When a public assistance applicant was first deemed eligible, he was sent a small pamphlet describing the Medicaid program and the services to which he was entitled.

As a major U.S. city, Atlanta is somewhat unique in that it is divided between two counties--Fulton and DeKalb. The hard-core low-income area is in the eastern end of that portion of the city which lies in Fulton County. (As indicated in Chapter II, the survey was limited to Fulton County.)

During the presurvey site visit**with state and local health and welfare officials, it was learned that accessibility to primary care delivery points was not a major problem for people in this low-income area. For years, Grady Hospital, in downtown Atlanta, had been a county-supported charity institution, and a large number of eligibles still continued to use it. Public transportation from the eastern end of the city into the downtown area was claimed to be fairly good. In addition, part of this community was serviced by the OEO-sponsored Atlanta South-side Comprehensive Health Center, a program which offered a truly comprehensive set of services to individuals living within its catchment area.

Aside from this OEO health center (which, of course, is limited to people living in a defined geographical area), there were several other programs in Atlanta which provided vision and dental care at little or no cost to the indigent. These are as follows:

1. Eye care
    a. Grady Hospital Eye Clinic. Grady Hospital had an eye clinic which did refractions free of charge for the Title XIX eligibles. However, for glasses there was a $15.00 charge which was waived only in extremely dire cases. As a client usually had to wait

---

*As noted in Chapter I, these services are now covered by the Georgia Medical Assistance Program for all eligibles up to age 21.

**The presurvey site visit took place in November 1972.

three to four months for an appointment and often had to make several trips before being serviced, this did not represent a very convenient method of obtaining routine eye care.

b. Benjamin Massell Eye Clinic. Benjamin Massell, a local philanthropist of the early twentieth century, established an eye clinic for the needy, which provided both refractive tests and glasses free of charge. However, it, too, had been plagued by a rather severe backlog of appointments and was only capable of filling a limited number of requests.

c. Lions Club. The local Lions Club had a small fund which it used to contract with a local optician to provide glasses for the needy. The client first had to obtain a prescription from an opthalmologist or optometrist. The fund was very small and usually depleted long before the end of the year.

d. State Vocational Rehabilitation Program. If a client was deemed to have good employment potential subject to his acquiring glasses, the Georgia Vocational Rehabilitation Program would pay for them.

2. Dental care

a. Ben Massell Dental Clinic. This clinic provided routine care to welfare children under 6 and over 18. The local health department had a school program which provided examinations and routine dental care to the school-age children. There was currently a three to four month backlog at Ben Massell.

b. Aside from the OEO program, which was geographically limited, there were virtually no resources for orthodontia and dentures. Again, Vocational Rehabilitation would provide either if it was deemed necessary for employment purposes.

c. Other supplemental dental programs include those sponsored by Grady Hospital, Emory University School of Dentistry, and the Central Presbyterian Baby Clinic.

To summarize, although there were several programs which, in effect, served as a supplement to Medicaid in providing some of the optional services which were not at that time covered in Georgia, these programs were extremely limited in terms of the number of people that they could assist and were characterized by a rather long backlog of demand.

AD and OAA Eligibles

Demographic Characteristics

Data were collected and tabulated on a total of 111 AD recipients and 174 OAA recipients in Atlanta. Response rates for these and all subsequent subpopulations are discussed in Chapter 2 and Appendix B. Table 3-1 presents these subpopulations cross-classified by the following selected demographic variables: sex, age, education, marital status, and living arrangement (single vs. multiple person households). Among the AD sample of 111 eligibles, 80

(72%) were black and 31 (28%) were white.* There were almost twice as many AD females as males, but the majority of the former were beyond the effective childbearing age range. Only 16% of these AD eligibles were married, and roughly 40% lived by themselves, a factor which may well have a significant influence on their health care behavior patterns. Only four AD eligibles claimed that they had some form of additional health insurance coverage (not including Medicare).

Similar to the AD sample, a majority of the OAA eligibles were black (63%), female (78%), not married (81%), and lived in multiple person households (59%). They were almost evenly split between the two age categories, 65-74 and 75 and over. The vast majority (88%) stated that they were Medicare beneficiaries, and 9% claimed to have private health insurance coverage.

Hospitalization and Nursing Home Care

The hospital admission rate of the AD eligibles was substantially higher than that of the OAA (Table 3-2). Forty-two percent of the AD sample had been admitted to a hospital on at least one occasion during the previous 18 months for an admission rate of 69.4 admissions per 100 eligibles.** This is in contrast to the OAA eligibles, of whom 25.9% had been hospitalized for an admission rate of 52.3 admissions per 100. Not only were the AD eligibles hospitalized more frequently, they also tended to stay longer, the respective mean lengths of stay for the last admission being 15.7 and 12.0. Thus, employing our assumption about the representative nature of this last admission (see footnote to Table 3-2), we see that the total number of inpatient days per 100 eligibles was roughly 70% higher among the AD eligibles. This may reflect a higher level of chronicity among AD eligibles.

---

*Race was determined, for the most part, by interviewer observation. In the few cases where the interviewer was unable to or neglected to make this observation, the Medicaid agency's classification was adopted. In Atlanta, none of the OAA, AD or AFDC sample eligibles were Spanish-speaking. This was not surprising because of the small number of Medicaid eligibles in this category in Atlanta.

**The admission rates and total number of inpatient days statistics are based on the roughly 18-month reference period January 1972-Summer 1973. Among the OAA, there is some evidence of underreporting for 1972 admissions. Other things being equal, roughly twice as many admissions should be expected in a year as in a 6-month period. However, this was not the case for the OAA. The AD cited 25 admissions for the first half of 1973 and 52 for 1972, but the OAA reported 43 for 1973 and only 48 for 1972. This possible underreporting among the OAA may account for their comparatively lower utilization rate. For 1973 alone, the two groups are much closer.

TABLE 3-1. SELECTED DEMOGRAPHIC CHARACTERISTICS: ATLANTA OAA AND AD ELIGIBLES*

	OAA TOTAL			OAA, 65-74			OAA, over 75			AD		
Characteristics	T	W	B	T	W	B	T	W	B	T	W	B
Sex												
% Male	22.4	26.2	20.2	24.4	35.5	18.6	20.2	17.6	22.0	34.2	35.5	33.8
% Female	77.6	73.8	79.8	75.6	64.5	81.4	79.8	82.4	78.0	65.8	64.5	66.2
Age												
% less than 44	0.6	0	0.9	1.1	0	1.7	0	0	0	26.1	25.8	26.2
% 45 to 64	1.7	0	2.8	3.3	0	5.1	0	0	0	68.4	71.0	67.6
% 65 to 74	47.7	49.2	46.7	90.0	96.8	86.4	2.4	5.9	0	5.5	3.2	6.2
% over 75	48.8	50.7	47.7	3.3	3.2	3.4	97.6	94.1	0	0	0	0
Education												
% none	6.9	1.5	10.1	4.4	0	6.8	9.5	2.9	14.0	6.3	12.9	3.8
% Grades 1-6	59.2	55.4	61.5	60.0	58.1	61.0	58.3	52.9	62.0	42.3	25.8	48.8
% Grades 7-12	27.5	33.8	23.8	32.3	38.8	28.9	22.6	29.4	18.0	48.6	58.1	45.0
% post high school	1.2	1.5	0.9	1.1	0	1.7	1.2	2.9	0	1.8	3.2	1.3
Marital Status												
% married	19.0	26.2	14.7	23.3	38.7	15.3	14.3	14.7	14.0	16.2	32.3	10.0
% not married**	81.0	73.8	85.3	76.7	61.3	84.7	85.7	85.3	86.0	83.8	67.7	90.0
Living Arrangement***												
% living alone	40.2	38.5	41.3	46.7	38.7	50.8	33.3	38.2	30.0	40.5	35.5	42.5
% not living alone	59.8	61.5	58.7	53.3	61.3	49.2	66.7	61.8	70.0	59.5	54.5	57.5
Total number of eligibles	174 (0)	65 (0)	109 (0)	90 (0)	31 (0)	59 (0)	84 (0)	34 (0)	50 (0)	111 (0)	31 (0)	80 (0)

*Percentages do not always sum to exactly 100% because of a few "don't knows" and "no answers."

**Not married comprises those eligibles who are either single, widowed, separated, or divorced.

***The living arrangement proportions are based on the number of eligibles. The remaining demographic variables in this table were based on eligibles plus some individuals (indicated in parentheses) who were not eligible for Medicaid and who, for the most part, were legal guardians in whose name the assistance checks were issued.

Among the AD eligibles, Medicaid was the principal method of payment. Almost 80% of the AD eligibles hospitalized in 1972-73 cited it as the payor for their last admission. Only five (10.6%) of these reported an out-of-pocket expense, although the average was substantial (mean = $537.50). Among the OAA, roughly 10% paid something themselves (mean = $83.30), the vast majority having reported payment by either Medicaid or Medicare. These results indicate a fairly high level of awareness on the part of these eligibles of the hospital benefits to which they are entitled. Either they were familiar with the benefits package themselves (perhaps largely to the credit of the "marketing" efforts of the State Medicaid agency), or they were informed of this coverage by their physician or hospital personnel upon admission. It is possible that some of those who paid themselves were not eligible at the time of the admission. This may be particularly true among the OAA eligibles who had recently turned 65 years of age.

TABLE 3-2. UTILIZATION AND OUT-OF-POCKET EXPENSE FOR INPATIENT HOSPITAL CARE: ATLANTA OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% Hospitalized in 1972-73	25.9	30.8	22.9	20.4	25.8	20.3	29.8	35.3	26.0	42.0	35.5	45.0
Number of admissions per 100 eligibles in 1972-73	52.3	61.5	46.8	46.7	41.9	49.2	58.3	78.4	44.0	69.4	77.4	66.3
Mean length of stay on last admission	12.0	8.7	14.5	12.0	10.1	13.3	11.8	7.7	15.7	15.7	18.6	14.9
Total number of in-patient days per 100 eligibles*	627.6	535.0	678.6	560.4	423.2	654.4	687.9	611.4	690.8	1089.6	987.9	1439.6
Out-of-pocket expense												
Percent**	22.2	15.0	28.0	25.0	0	41.7	20.0	25.0	15.4	10.6	27.3	5.6
Mean ($)**	83.30	157.50	62.10	74.00	0	74.00	95.00	157.50	32.50	537.50	900.00	175.00
Median ($)**	50.00	237.50	50.00	70.00	0	70.00	40.00	237.50	40.00	600.00	1000.00	175.00

*The total number of inpatient days is calculated by multiplying the number of admissions by the mean length of stay for the last admission. This obviously assumes that the latter is fairly representative of all admissions.

**The out-of-pocket percentages are based on the number who used the service, not the entire sample; the means and medians are calculated over those who paid out-of-pocket. This is the case for all similar tables throughout this report.

Nursing home utilization was very low. Only 1 AD eligible and 5 OAA eligibles had ever been in a nursing home. (Recall that permanent nursing home residents were excluded from the sampling frame--see discussion in Chapter 2).

Dental Care

Table 3-3 presents a summary of the dental care patterns and needs of the OAA and AD sample eligibles. Due largely to their greater use of dentures, the OAA eligibles showed a much lower need for, and utilization of, dental services than did their AD counterparts. An examination of Table 3-3 reveals that a substantially higher proportion of the AD eligibles had established a regular dental care pattern (p = .0119), had seen a dentist at least once during the previous 18 months (p = .0000), had experienced an unmet dental need during this same period (p = .1151), and had a dental problem at the time of the interview (p = .0096).

Among the eligibles who did not regularly see a dentist, a much larger proportion of blacks than of whites in each assistance category attributed this behavior to a lack of any perceived need for such care. These racial differences are substantial; for the OAA (7.9% white vs. 16.8% black) p = .0548, and for the AD (7.1% white vs. 36.5% black) p = .0000. In contrast, among both the OAA and the AD, proportionally more whites cited dentures in this context; for the OAA (57.1% white vs. 44.9% black) p = .0636; for AD (35.7% white vs. 17.6% black) p = .0239. Furthermore, within the OAA category, these two trends held in both of the age subpopulations, thereby largely eliminating age as a confounding variable.

In light of the greater use of dentures among whites, it is not particularly surprising that proportionally more blacks had seen a dentist in 1972-73, OAA (p = .1112) and AD (p = .2327). Nor, for the same reason was it puzzling either that a higher proportion of OAA blacks reported a current dental problem or that a higher proportion of blacks among the OAA, over 75 subpopulation cited an unmet need for dental care. These results are more likely to reflect the greater incidence of dentures among the whites than they are to refute the popular notion that blacks are less cognizant than whites of their dental health. Recall that a much larger proportion of blacks attributed their lack of any regular dental care pattern to a subjective evaluation that they did not have any need for it. A popular interpretation of this data would suggest that the predominance of this "not sick enough/no need" response among blacks demonstrates a combination of less awareness of the benefits of good dental care, a higher level of fear born of this ignorance, and a generally higher threshold of pain among blacks, all of which may result, in part, from the cultural and economic deprivations that they have suffered over the years. This interpretation is not necessarily incompatible with a higher level of use of dental services among the blacks at the present time, since this could merely be a function of the catch-up factor, after years of neglect, for those with particularly serious or extensive problems. It is generally accepted that historically blacks have suffered a lower state of dental health than whites. A resolution of the questions of whether this trend continues today or whether it holds within similar income groups, would, naturally, require a form of clinical evaluation neither contemplated nor undertaken by this study.

TABLE 3-3. UTILIZATION, OUT OF POCKET EXPENSE, AND UNMET NEEDS FOR DENTAL CARE: ATLANTA, OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	2.3	3.1	1.8	1.1	0	1.7	3.6	5.9	2.0	8.1	9.7	7.5
% saw dentist in 1972-73	9.7	6.2	11.9	11.1	9.7	11.9	8.4	2.9	12.0	34.2	29.0	36.3
Out-of-pocket expense												
Percent*	76.5	65.0	76.9	80.0	66.7	85.7	71.4	100.0	66.7	23.7	22.2	24.1
Mean ($)*	31.60	48.00	27.20	37.40	68.50	28.60	21.20	7.00	24.70	23.30	68.50	10.40
Median ($)*	12.00	12.00	12.00	12.00	107.50	8.70	12.00	7.00	23.50	10.30	107.50	8.10
% that had an unmet dental need in 1972-73	24.1	20.0	26.6	28.9	29.0	28.8	19.0	11.8	24.0	30.6	35.5	28.8
% that had a current dental problem	30.5	21.5	35.8	38.9	32.3	42.4	21.4	11.8	28.0	44.1	45.2	43.8

*See footnote to Table 3-2.

Among the AD eligibles who had seen a dentist, the mean number of visits for half of 1973 slightly exceeded the mean number that were reported for all of 1972, respectively 2.1 and 2.0. This probably reflects a recall problem due to the comparatively low saliency of such visits (say, in contrast to hospital admissions).* The OAA, likewise, failed to meet the expected 2:1 ratio between all of 1972 and half of 1973, the respective means being 2.0 and 2.2.

Almost three-fifths (57.9%) of the AD eligibles who had seen a dentist in either 1972 or 1973 reported that Medicaid paid for the service, a rather suspect finding in light of the fact that at that time the Georgia program generally did not cover dental care for adults.** Roughly 24% paid at least part of the charge themselves. Among the OAA, approximately 77% met at least part of the charge themselves, a much more plausible result. Lest the mean expenditures enumerated in Table 3-3 mislead the reader into inferring that Atlanta's dentists are charging the poor an exorbitant amount, it should be noted that for many of these eligibles at least part of the payment was for dentures.

The number of OAA and AD eligibles who regularly saw a dentist was too small to enable any meaningful analysis of the sources used for obtaining such care.

---

*For a more complete analysis of this recall problem, see Appendix D. In general, it was found that, while the number of reported dental visits frequently conflicted with the number listed in the paid claims tapes, the number of eligibles who reported having gone at all (i.e., the attributes rather than the measurement variables) was much more accurate. This being the case, the attributes provide substantially more reliable measures of accessibility, and this is the reason why we have placed greater emphasis on them (rather than the number of visits) throughout this entire report.

**Several possible explanations of this finding are explored below, in the dental care section of the Atlanta AFDC profile.

As indicated in Table 3-3, respectively 24.1% and 30.6% of the OAA and AD samples reported having experienced an unmet need for dental care during 1973-73. Among the OAA, dentures and extractions were the most frequently cited unmet needs; among the AD, gum disease and extractions were. In both assistance categories the major reported barrier to accessibility was a lack of financial resources. Of those with an unmet need, 53% of the AD and 66% of the OAA blamed their failure to obtain the needed care on a lack of money. This means that, over the entire sample, 16.2% of the AD and 15.5% of the OAA implied that the status of their dental health had suffered as a result of insufficient financial resources and/or lack of Medicaid coverage. This problem was undoubtedly particularly acute among the eligibles who needed dentures, due to their expense. Transportation was not deemed a substantial obstacle to dental care accessibility, with less than 3% of the sample citing it as a problem.

Vision and Hearing Care

The data in Table 3-4 dramatize the high level of unmet needs for eyeglasses and eye/vision services in general among the OAA and AD eligibles. While the OAA over 75 appeared to be somewhat more successful than the other subgroups in obtaining the needed glasses, this may simply reflect the fact that their unmet eye care needs had a longer time to deteriorate to the point where glasses became more of a necessity than a convenience. For example, the OAA over 75 had more success in meeting these needs than either the OAA, 65-74 or the AD, although even in this group less than half of those who thought they needed glasses managed to secure them.

The figures in Table 3-4 do not afford any simple, unequivocal assessment of the comparative abilities of blacks and whites to obtain eyeglasses and eye/vision services. With respect to both use and need levels, the black-white differences vary in direction across the four principal subpopulations (OAA total, 65-74, over 75, AD), the only exception being the proportion who had received eye/vision services in 1972-73. Here, the blacks consistently evinced a higher utilization--(OAA, 65-74) $p = .1401$, (OAA, over 75) $p = .0749$, and (AD) $p = .1803$. Since a much larger proportion of whites than of blacks had received such services prior to 1972, these results should be interpreted to imply not a differential level of accessibility, but, rather, the operation of the so-called catch-up factor among blacks. The consistency of the pattern leads one to suggest that the Medicaid program has, indeed, resulted in some evening out between whites and blacks and to hypothesize that after a period of compensation for past deficiencies, utilization of eye care services will stabilize at approximately the same level for both races.

The nature of the eye/vision problems varied somewhat between the OAA and AD. Among the OAA who had received eye/vision services in 1973, cataracts were the major problem, while among their AD counterparts a plurality cited mechanical eye problems.

As reported in Table 3-4, the vast majority of the eligibles in each assistance category paid for their glasses themselves. A small percentage cited Medicaid, a finding which comports with the fact that at that time the Georgia program covered glasses only for organic eye diseases. However, the finding that a majority of the eligibles claimed that their last visit to a doctor for an eye/vision problem was paid by either Medicaid or Medicare

TABLE 3-4. UTILIZATION, OUT-OF-POCKET EXPENSE, AND UNMET NEEDS FOR EYE/VISION CARE: ATLANTA OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that obtained eyeglasses in 1972-73	28.7	26.2	30.3	28.9	25.8	30.5	28.6	26.5	30.0	22.5	29.0	20.0
Out-of-pocket expense												
Percent*	86.0	88.2	84.5	80.8	75.0	83.3	91.7	100.0	86.7	76.0	55.6	87.5
Mean ($)*	45.60	45.30	45.80	49.00	52.20	47.60	42.20	40.80	43.40	30.70	27.90	31.80
Median ($)*	44.40	42.50	46.00	50.00	60.00	46.70	40.00	34.90	45.00	26.10	26.70	25.70
% that had an unmet need for glasses in 1972-73	41.4	41.5	41.3	45.6	51.6	42.4	36.9	32.4	40.0	45.9	48.4	45.0
% that obtained eye/vision care in 1972-73	40.8	32.3	45.9	40.0	32.3	44.1	41.6	32.3	48.0	36.0	29.1	38.8
Out-of-pocket expense												
Percent*	39.4	45.4	36.4	26.7	16.7	33.3	50.0	80.0	38.5	16.7	0	20.0
Mean ($)*	41.20	45.00	39.30	50.50	90.00	37.30	36.60	30.00	40.50	30.00	0	30.00
Median ($)*	32.20	32.20	32.20	60.00	90.00	30.00	31.30	30.00	33.20	30.00	0	30.00
% that had an unmet need for eye/vision care in 1973	40.8	36.9	43.1	50.0	51.6	49.2	31.0	23.5	36.0	40.5	45.2	38.8

*See footnote to Table 3-2.

suggests the possibility that many of these eligibles received this care at a voluntary or public clinic and believed that it was handled by one of these government programs. Other possible explanations would include the provision of free care by optometrists with the eligibles thinking that Medicaid paid for the service or, possibly, the use of the family physician for eye care services since physician services are one of the mandated benefits.

An examination of the resources used to obtain eye care adds further credibility to the above suggestion about the use of voluntary and public clinics. Of those who had received eye/vision care in 1973, almost three-fourths of the AD and close to one-half of the OAA indicated that they had last obtained such care at a hospital emergency room or clinic--probably, for the most part, Grady. Most of the remainder had used the private system. With respect to glasses, while the majority of the AD used a public or eleemosynary clinic, most of the OAA relied upon private optometrists, opticians, and eye glass companies. Undoubtedly, this explains, to a large extent, the higher rate of out-of-pocket payments for glasses and the higher mean expense among the OAA. Their preference for the private system cost the OAA eligibles an average of $15.00 more per pair of glasses.

As mentioned earlier, the reservoir of unmet needs for eye care was severe among these two assistance categories. In respectively 29.4% and 36.1% of the

AD and OAA eligibles who claimed an unmet need for glasses, the glasses had been prescribed by a doctor (a general practitioner, an opthalmologist, or an optometrist). Thus, even many of the eligibles who had access to eye care services were deterred by one reason or another from procuring the needed lenses. Furthermore, the evidence strongly implies that a lack of money/lack of Medicaid coverage was the major obstacle. Of those who cited an unmet need for glasses, roughly 60% in each assistance category imputed this to inadequate financial resources. In addition, roughly half of those in each category who reported an unmet need for eye vision care in 1973 perceived money to be the obstacle (or at least one of the obstacles). Transportation posed a problem for approximately 10-15% of these eligibles.

The unavailability of Medicaid coverage for routine eye care apparently had a devastating impact, not only upon the behavior of the OAA and AD eligibles with respect to securing such care, but also upon their ability to obtain glasses in the minority of cases where such access had already been achieved. Atlanta, with its multiplicity of public and voluntary supplemental eye programs designed to provide eye care to the indigent at little or no cost, demonstrates--perhaps more than most American cities--the fallacy of relying upon such a hodge-podge combination of limited programs to meet the vision needs of America's poor. Since transportation was not a major difficulty, one must conclude that the addition of eye care to the Georgia Medicaid benefits package would do much to alleviate the need-use gap manifested in this study. (This does not necessarily apply, of course, to the rural areas of Georgia, where transportation and provider shortages represent much more serious problems than in Atlanta.)

Given the expense of purchasing a hearing aid, and the lack of Medicaid coverage, it is not surprising that the vast majority of eligibles who thought that they needed such a device had not actually obtained it. Of the 46 OAA and AD eligibles who needed a hearing aid, only 6 (13.0%) had procured one. However, as only three of the remaining 40 indicated that the device had been prescribed by a physician, there was very little clinical substantiation of these perceived needs. Respectively 10.8% and 17.8% of the AD and OAA sample cited an unmet need to see a physician about an ear/hearing problem in 1973. Not surprisingly, age appeared to be positively related to this backlog of unmet ear/hearing problems. This backlog was most acute among the OAA, over 75, followed by the OAA, 65-74, and finally by the AD. While hearing aids and ear/hearing care in general may not represent a very extensive problem to the younger eligibles (particularly, as we shall see, to the AFDC), among the elderly, as many as 20-25% indicated an unmet ear/hearing need.

Physician Services and Prescriptions

Table 3-5 summarizes the ambulatory care patterns of the OAA and AD eligibles. The data suggest somewhat higher levels of need and use of ambulatory care services among the AD eligibles than among the OAA, a finding which may well be explained by the greater prevalence of chronic conditions among the AD. Approximately 86% of the AD answered that they had a medical problem which required periodic medical attention, in contrast to 69.8% of the OAA. Also, whites consistently had a higher level of unmet needs than blacks, a result which likewise may be explained by the comparatively greater prevalence of chronic conditions among the whites. It is also conceivable that many whites were reluctant to use

TABLE 3-5. UTILIZATION, OUT-OF-POCKET EXPENSE, AND UNMET NEEDS FOR PHYSICIAN SERVICES:* ATLANTA, OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	72.4	75.4	70.6	75.6	74.2	76.3	69.0	76.5	64.0	81.1	74.2	83.8
Out-of-pocket expense												
Percent**	13.0	20.8	8.2	9.2	12.5	7.7	17.5	27.6	9.1	6.0	14.3	3.6
Mean ($)**	12.40	14.70	8.70	10.80	18.50	5.70	13.30	14.20	11.70	14.90	9.75	18.30
Median ($)**	10.60	14.20	7.20	11.60	18.50	5.70	10.90	12.00	3.60	15.00	14.50	18.30
% that had an unmet need to see a physician in 1973	28.7	30.8	27.5	35.6	38.7	33.9	21.4	23.5	20.0	34.2	41.9	31.3

*Excludes inpatient hospital care and dental, vision, and hearing care.
**See footnote to Table 3-2.

Grady Hospital's emergency room and outpatient department because they viewed it as "inferior, black man's care." This hypothesis is at least consistent with the patterns of use which are analyzed below.

Among the eligibles who reported a health problem which required periodic medical attention, hypertension and coronary artery disease were by far the most prevalent conditions in both assistance categories. Taken over all the eligibles, hypertension appeared to be substantially more prevalent among blacks (26.3%) than among whites (12.9%) in the AD sample ($p = .0655$), while in the OAA sample there was not a very sizeable difference.* Of the chronic eligibles in both assistance categories, it was reported that approximately 28% usually received an injection during their periodic visits; roughly 90% usually received a prescription; approximately 14% were frequently given free samples; and roughly 5% were often advised by their physician to obtain some nonprescription medication for their condition(s).

The administration of medication through either an office injection or a prescription was much less common among the eligibles whose last visit was not related to a chronic ailment for both the OAA and the AD. In the OAA category, a somewhat larger proportion (20%) of those eligibles received a free sample than was the case with the chronically ill; however, for the AD, the reverse was found (8.7%). As with the chronic cases, only a very small percentage of these eligibles had been urged to purchase nonprescription medication.

Combining the chronic and nonchronic cases, the overwhelming majority of the eligibles are taking advantage of their Medicaid eligibility and, in the case of the OAA, their Medicare eligibility. As indicated in Table 3-5, only 13% of the OAA and 6% of the AD claimed an out-of-pocket expense for their last or typical visit. Though the numbers are small, the data reveal a somewhat greater tendency among whites to pay out-of-pocket, p = .0041. Since virtually all of these whites stated that Medicaid would not pay for their last or typical visit, there is some reason to believe either that they were using physicians who were not participants in the Medicaid program or that they were not fully aware of their benefits package.* However, for both blacks and whites, the vast majority were going through the Medicaid system.

---

*National data suggest a higher incidence of hypertension among blacks than among whites.

Age and race both appeared to be very influential factors in determining the sources used for obtaining ambulatory care. In both assistance categories, Grady Hospital served as the usual source of outpatient care for a majority of those eligibles who had seen a physician in 1973, and it was named as the usual source of care by a majority of those who either had a regular doctor or saw a doctor when necessary.** Its popularity, however, was much greater among the blacks relative to the whites (p = .0000) and among the AD relative to the OAA (p = .0013). This latter trend was probably a function of age differences, for even within the OAA, a larger proportion of the 65-74 subpopulation than the over 75 group relied upon Grady, p = .0075, a trend which held for both races. Hence, the propensity to use Grady seemed to be negatively associated with age. It was only among the OAA, over 75, whites that a majority named a private physician as their usual source of care.

As shown in Table 3-5, fairly high percentages--28.7% among the OAA and 34.2% among the AD--of the eligibles had experienced an unmet need to see a physician in the first half of 1973. The reservoir of unmet needs was higher among the whites and the AD, possibly due to differences in the proportional frequency of chronic conditions. For both the OAA and the AD, transportation was the most common obstacle to accessibility, having been cited by approximately 34% of the eligibles with such an unmet need in each assistance category. This may be a result not so much of poor regional transportation as of the possibly unique transportational difficulties encountered by the elderly and the disabled. An inability to pay was listed as an obstacle by 20.0% and 28.9% respectively of those OAA and AD eligibles, perhaps again reflecting either ineligibility at the time of the unmet need, ignorance of the benefits structure, or use of a nonparticipating physician.

Fifty-nine percent of the AD and 51.7% of the OAA claimed that they had received a physical checkup within the previous 18-month period. It should be noted, however, that there was a great deal of variability among the respondents regarding exactly what constituted a checkup. It is suspected that many had nothing more than a stethoscope and blood pressure check and this probably accounts, to a large extent, for the surprisingly large proportion of eligibles who purportedly had obtained a checkup.

---

*It is also conceivable that some of these eligibles were not on the Medicaid rolls at the time of the visit, although this is less likely here than for hospitalization, since most of the physician visits occurred within a few months of the interview. Also, among the OAA, some may not have known that Medicaid usually covered the Medicare Part B copayment for physician visits.

**A random sample of 200 questionnaires revealed that in virtually every case where the respondent reported that his usual course of care was a hospital emergency room or outpatient department, the hospital named was Grady.

TABLE 3-6. ISSUANCE, OUT-OF-POCKET EXPENSE, AND FILLING OF PRESCRIPTIONS: ATLANTA OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	47.1	58.5	40.4	43.3	54.8	37.3	51.2	61.8	44.0	54.1	48.4	56.3
% that failed to fill or refill as needed*	9.8	5.3	13.6	7.7	5.9	9.1	11.6	4.8	18.2	11.7	20.0	8.8
Out of pocket Expense												
Percent**	48.3	69.5	34.8	43.2	58.6	34.6	54.3	80.0	35.0	32.7	50.0	26.0
Mean ($)**	34.70	46.60	18.50	29.00	32.70	25.30	41.00	57.70	7.50	21.60	39.50	5.90
Median ($)**	14.50	25.20	4.10	23.00	24.70	14.50	13.20	26.00	2.60	5.50	23.00	3.50

*This percentage is based on the eligibles who had ever received a prescription from a physician.
**This percentage is based on the eligibles that received a prescription in 1973. The mean and median are based on those that paid themselves.

Over 90% of the OAA and AD eligibles who had received a prescription in 1973 filled all of their 1973 prescriptions and refilled them as needed (Table 3-6). Thus, despite the fact that 32.7% of the AD and 48.3% of the OAA usually paid, at least partially, for their prescriptions themselves, this did not seem to be a major obstacle. Since such a large proportion usually incurred out-of-pocket expenses for a covered service, one suspects either that the eligibles were not fully aware of this benefit or that they were using pharmacists who did not participate in the Medicaid program. Over three-fourths of the OAA and AD eligibles who paid themselves answered either "no" or "don't know" to the question, "Would Medicaid have paid for any of the out-of-pocket costs of [these] prescriptions?"

As was true of the ambulatory care patterns, the tendency to rely upon Grady as a resource for filling prescriptions was much greater among blacks than among whites in both assistance categories, OAA (p = .0000), and AD (p = .0022), and appeared to be negatively associated with age in both races. For example, the proportion of whites who usually filled their prescriptions at a hospital pharmacy (for the most part, that of Grady) increased from the OAA, over 75 (16.7%) to the OAA, 65-74 (44.8%) to the AD (53.3%), AD-OAA over 75 (p = .0015).

Respectively, 41.4% and 58.0% of the AD and OAA samples were currently using nonprescription medication. Of these, roughly one-third of the OAA and one-fifth of the AD stated that the medication had been recommended by a physician.*

---

*A much larger proportion indicated the use of nonprescription medication at the behest of a physician in Section H of the questionnaire than previously in Section G. The discrepancy may be due to two factors: (a) in Section H, the question was asked of everyone, not just those who had seen a physician in 1973, and (b) in Section G, the term "usually" was added to the questions.

TABLE 3-7. SUBJECTIVE HEALTH RATINGS: ATLANTA OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
Rating	T	W	B	T	W	B	T	W	B	T	W	B
Percent												
Excellent	3.4	3.1	3.7	2.2	0	3.4	4.8	5.9	4.0	0	0	0.
Good	35.1	24.6	41.3	30.0	29.0	30.5	40.5	20.6	54.0	23.4	22.6	23.8
Average	25.3	30.8	22.0	27.8	29.0	27.1	22.6	32.4	16.0	14.4	12.9	15.0
Poor	36.2	41.5	33.0	40.0	41.9	39.0	32.1	41.2	26.0	62.2	64.5	61.3

In both categories, proportionally more whites than blacks used nonprescription medications, OAA (p = .0454) and AD (p = .0380). Furthermore, of those who used such medication, the mean amount expended for it was consistently higher among whites than blacks.

Home Health Care and General Health Status

Roughly 14% of the eligibles in each of these assistance categories had received some form of home health care service in 1972-73, for the most part that of a visiting nurse. Blacks consistently used such services more than whites, OAA (p = .0363) and AD (p = .1875). This may reflect greater acceptance of these services among blacks. Approximately 9-10% of the eligibles cited an unmet need for home health care, with little variation across racial and assistance lines. Money and ignorance with respect to the sources of such care were the two major obstacles cited.

Among both the OAA and the AD, roughly 16-17% had used walkers or crutches within the previous 18 months. They had been obtained from quite a variety of sources. The majority of these eligibles, however, did not have to pay anything for these devices. Only 1% of the OAA and 4% of the AD reported having had an unmet need for walkers or crutches since the beginning of 1972.

The subjective health ratings, presented in Table 3-7, reveal that over one-third of the OAA eligibles and over three-fifths of the AD eligibles considered their health to be "poor." The most commonly cited explanations were frequency of illness, physical incapacities, heart conditions, and hypertension.

Only a small minority (6.9% of the OAA and 4.5% of the AD) rated the health services available to them as poor.* Roughly half of the OAA and AD eligibles could not think of any additional health services from which they could benefit, while approximately 9-10% each cited dental care and eye care. Four percent of the OAA and 6.3% of the AD cited poor transportation in this context. In general, the OAA and AD eligibles appeared relatively happy with their health care services, the two most salient exceptions being in the areas of dental and vision care.

---

*The questions were asked on a family rather than an individual basis. In the coding, each eligible in the family was given the rating that the respondent gave for the household.

TABLE 3-8. SELECTED DEMOGRAPHIC CHARACTERISTICS: ATLANTA AFDC ELIGIBLES*

	AFDC Total			Children			Adults		
Characteristic	T	W	B	T	W	B	T	W	B
Sex									
% male	35.6	40.9	35.2	46.7	52.3	46.2	2.8	10.0	2.1
% female	64.1	59.1	64.5	52.9	47.7	53.4	97.2	90.0	97.9
Age									
% under 1 year	6.9	5.4	7.1	9.2	7.3	9.4	0	0	0
% 2-5 years	16.1	15.4	16.2	21.6	21.1	21.6	0	0	0
% 6-20 years	51.8	52.3	51.8	69.2	71.6	69.0	0	0	0
% 21-44 years	21.3	19.5	21.5	0	0	0	84.7	72.5	85.9
% over 45 years	3.8	7.3	3.5	0	0	0	15.3	27.5	14.1
Education									
% none	24.4	22.8	24.6	32.6	31.2	32.7	0.2	0	0.2
% Grades 1-6	31.3	34.2	31.0	37.8	40.4	37.6	11.7	17.5	11.1
% Grades 7-12	42.0	40.3	42.1	28.3	27.5	28.3	82.8	75.0	83.5
% post high school	1.4	2.0	1.4	0.4	0	0.5	4.4	7.5	4.2
Marital status									
% married	3.0	9.4	2.4	0.4	0.9	0.3	10.8	32.5	8.8
% not married	97.0	90.6	97.6	99.6	99.1	99.7	89.2	67.5	91.2
Case size									
% 3 or less	38.6	45.4	38.0	35.6	41.3	35.1	48.4	59.4	47.5
% 4 or over	61.4	54.6	62.0	64.4	58.7	64.9	51.6	40.6	52.5
Total number of eligibles**	1831 (47)	141 (8)	1690 (39)	1403 (3)	109 (0)	1294 (3)	428 (44)	32 (8)	396 (36)

*See footnotes to Table 3-1.

**The case size proportions are based on the number of eligibles. The remaining demographic variables in this table were based on eligibles plus some individuals (indicated in parentheses) who were not eligible for Medicaid and who, for the most part, were AFDC mothers in whose name the assistance checks were issued.

AFDC Eligibles

Demographic Characteristics

Interview data were collected for 1,831 AFDC recipients in Atlanta. Table 3-8 breaks down the AFDC sample according to several select demographic characteristics. Over 90% of the sample was black. Almost three-fourths were classified as children (under age 21), of which approximately 9% were one year old or younger and an additional 22% were of preschool age (under 6). Among the children, 52% of the whites and 46% of the blacks were male. Among the adults, only 10% of the whites and 2% of the blacks were male, thus showing the familiar matriarchal family pattern among AFDC cases, particularly among blacks.

Most of the eligibles--adults as well as children--were single. Comparing the two races, we see that while 32.5% of the white adults were married, only 8.8% of the black adults were. There was very little difference between whites and blacks with respect to the mean household* size, a somewhat surprising

---

*This includes all persons living in the household, not merely those who were eligible for Medicaid.

TABLE 3-9. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE: ATLANTA AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% hospitalized in 1972-73	20.0	25.5	19.5	15.3	22.0	14.8	35.3	37.5	35.1
Number of admissions per 100 eligibles in 1972-73	26.5	39.0	25.4	18.0	28.4	17.2	54.2	75.0	52.5
Mean length of stay on last admissions	7.5	6.7	7.6	6.7	5.7	6.8	8.6	8.6	8.6
Total number of in-patient days per 100 eligibles in 1972-73	198.7	261.3	193.4	120.8	162.1	116.7	466.2	645.0	451.7
Out-of-pocket expense									
Percent*	9.6	16.7	8.8	12.1	20.8	11.0	6.0	8.3	5.6
Mean ($)*	143.80	77.00	159.80	179.40	52.50	25.70	63.80	175.00	47.90
Median ($)*	52.00	50.00	52.50	55.00	40.00	107.50	40.00	175.00	8.80

*See footnote to Table 3-2.

finding. Approximately 38.6% of the eligibles were in cases of size three or less, 61.4% in cases of size four or more.

There were 130 individuals*--87 children (6.2%) and 43 (10.0%) adults--who indicated that they had some form of additional health insurance, for the most part Blue Cross/Blue Shield or one of the commercial plans. This supplemental coverage was over three times more prevalent among the whites (18.8%) than among the blacks (5.9%), p = .0000.

Hospital and Nursing Home Utilization

As indicated in Table 3-9, 20.0% of the eligibles had been hospitalized in either 1972 or 1973 for a reported total of 485 admissions. Thus, the number of admissions per 100 AFDC eligibles for this 18-month period was 26.5. Not unexpectedly, the adults had a much higher proportion hospitalized (35.3%) and total number of admissions per 100 (54.2) than did the children (respectively 15.3% and 18.0 admissions). A larger proportion of whites (25.5%) than of blacks (19.5%) reported a hospital stay, a difference that was especially pronounced among the children (22.0% vs. 14.8%, p = .0226). Note also that a significantly larger proportion of children in cases of size three or less (25.6%) than of children in cases of size four or more (9.6%) reported a hospital stay in 1972-73. This finding undoubtedly reflects the younger age composition of the three or less category. A much larger proportion of this category was in infancy and, hence, would have been hospitalized for birth within the previous year.

---

*See footnote to Table 3-8.

TABLE 3-10. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE: ATLANTA AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	24.6	33.3	23.9	27.6	41.3	26.4	15.0	6.3	15.7
% saw dentist in 1972-73	49.3	54.6	48.8	49.0	58.7	48.3	50.0	40.6	50.8
Out-of-pocket expense for last dental visit									
Percent*	25.5	35.1	24.6	15.8	28.1	14.6	56.5	55.7	69.2
Mean ($)*	24.00	49.80	20.60	18.60	43.00	13.90	28.70	62.60	25.90
Median ($)*	11.00	17.80	10.40	9.80	17.00	8.80	11.80	25.70	11.60
% that had an unmet dental need in 1972-73	21.7	27.7	21.2	15.1	20.2	14.7	43.5	53.1	42.7
% that had a current dental problem	30.7	34.8	30.4	22.6	27.5	22.2	57.5	59.4	57.3

*See footnote to Table 3-2.

The mean length of stay for the last visit was 7.5 days--6.7 among the children and 8.6 among the adults. Employing the previously stated assumption about the representativeness of the mean length-of-stay of the last visit, we find the total number of inpatient days per 100 AFDC eligibles for this 18-month period was 198.7 as contrasted with the previously cited figures of 1089.1 among the AD and 627.6 among the OAA.

The vast majority (83.3%) of the hospitalized eligibles indicated that Medicaid was the payor for their most recent stay, while 4.9% cited other health insurance and 9.6% reported out-of-pocket expenditures with a mean outlay of $143.80 (median = $52.00). Over half of those that paid themselves indicated that Medicaid would not pay, a response which may reflect ineligibility at the time of the hospitalization. Thus, as was true for the OAA and AD, the AFDC eligibles in Atlanta appear to be generally cognizant of their hospital benefits and to be relying upon the Medicaid system to provide their inpatient hospital care.

There was only one AFDC eligible--a black adult--who had been in a nursing home since January 1, 1972. He was in the nursing home for a period of two to three months and his stay was completely paid by Medicaid.

Dental Care

Table 3-10 shows that approximately one-fourth of the AFDC eligibles reported regularly seeing a dentist. Among the children, the black-white contrast was in the expected direction--41.3% of the whites vs. 26.4% of the blacks, p = .0004. However, with respect to the adults, proportionally more blacks (15.7%) than whites (6.3%) regularly visited a dentist, a finding which is probably partially explained by the proportionally greater use of dentures among the white adults. (The proportions who had seen a dentist in 1972-73 followed this same trend.)

Case size appears to have had very little impact on the proportion of adults who regularly saw a dentist. However, among the children, its effect was substantial (p = .0000) with 32.0% of those in the four or more category in contrast to 19.6% of those in the three or less category regularly seeing a dentist. This is undoubtedly largely attributable to age. Since a much larger proportion of the three or less category were below school age, they are less likely to have needed dental care and to have been exposed to school dental programs. This finding is also consistent with the "family effects" hypothesis which maintains that the likelihood that an individual will use various types of health care services is a positive function of the degree to which other members of his family have utilized those services. Exposure of one member of the family to dental care, through a school program for example, may alter the other members' perceptions of need for such care. Genetic factors and similar nutritional patterns probably also contribute to this "family effect" on dental care utilization.

Of those 1016 children who did not regularly see a dentist, 39.7% ascribed this to a lack of perceived need for such care, 21.2% to their being too young, 18.0% to a lack of money, and 4.8% to not knowing where to find a dentist. Among the 364 adults, 34.3% cited a lack of perceived need, 26.6% a lack of money, and 11.8% the use of dentures. In both the children and the adult categories, proportionally more blacks (respectively 41.2% and 35.3%) than whites (respectively 17.2% and 23.3%) maintained that they did not have any need to see a dentist (respective p values = .0001 and .0924). In contrast, proportionally more whites of all ages (45.7%) than blacks (18.4%) claimed that they were unable to obtain regular dental care because of a lack of money, p = .0000. Dentures were also more prevalent among the white adults who did not regularly see a dentist (20.0%) than among their black counterparts (11.1%), (p = .0741).

Almost half of the eligibles had seen a dentist since the beginning of 1972. Among those who had seen a dentist in 1973, the mean number of visits was 2.0. As might be expected, there was some variation across the subpopulations with respect to the reasons for the last visit. Among the eligibles who had seen a dentist in either 1972 or 1973, extractions were much more common among the blacks (42.9%) in contrast to the whites (24.7%), p = .0010, and among the adults (64.0%) in contrast to the children (34.3%), p = .0000. As noted previously, the former result is consistent with the popular belief that blacks are less cognizant of the need for good preventive dental care than are whites and, as a consequence, suffer a poorer state of dental health. Even among the children, where one might feel that the school dental programs would somewhat mitigate this difference, proportionally more blacks (35.7%) than whites (20.3%) reported having had an extraction on their last visit, p = .0067. Thirty-nine percent received a checkup or cleaning on the last dental visit--46.9% of the children and 13.6% of the adults, p = .0000. Dentures, again, were more prevalent among the adult whites (38.5%) than among the adult blacks (8.5%).

Regarding methods of payment for this last visit, 25.4% cited Medicaid, a rather strange finding since, at the time of the study, the Georgia program did not cover dental care except, on a very limited basis, for children under age 6 through the screening program. Perhaps, the adults who were referred to the Ben Massell Dental Clinic or some other voluntary agency by their case worker thought that Medicaid handled the bill. Perhaps, in some cases, the dentists provided the care free of charge and told the eligibles that Medicaid would pay for it. Out-of-pocket expenses were incurred on the last visit by 25.5% of these eligibles, the mean outlay being $23.97 (median $10.96). (This distribution is skewed to the right due to the fact that 26 of these eligibles indicated that at least part of the payment was for dentures.)

There was little reliance on the private dentist as the regular source of dental care. Of those who regularly saw a dentist, only 15.7%--11.9% of the children and 39.1% of the adults--cited a private dentist in this context, while 42.6% and 36.4% respectively cited voluntary/public clinics and public/parochial school programs. Very few (8 = 1.8%) eligibles used the resources of university dental school programs (e.g., that of Emory University), a finding which was consistent with the information that we had received during our site visit.

As shown in Table 3-10, 21.7% of the eligibles had experienced an unsatisfied need for dental care. Not surprisingly, this percentage was much higher among the adults (43.5%) than among the children (15.1%), a finding which undoubtedly reflects the large proportion of children who are too young to require dental care and the greater availability of such care to the children through the public and parochial school programs and the Medicaid screening program, p = .0000. The incidence of perceived unmet dental needs was proportionally higher among whites (27.7%) than among blacks (21.2%), a result which also comports with the above-mentioned popular belief concerning the differential cognizance and perception of dental status between whites and blacks, p = .0360. For the most part, these unmet needs concerned restorative and extractive procedures. Of all the children in the AFDC sample, only 0.9% were perceived by the respondent (almost always a parent or guardian) to have experienced an unmet need for orthodontic work.

The principal barrier to treatment was a lack of money (49.6%), followed by fear (presumably of either the dentist or the neighborhood, 14.9%), excessive waiting lists (7.1%), lack of transportation (5.8%), and not knowing where to locate a dentist (5.6%). Lack of money was a substantially greater barrier to the whites (79.5%) than to the blacks (46.3%), p = .0000. This probably reflects the greater saliency of other deterrents (e.g., excessive waiting lists and fear) among the blacks and the greater reliance of whites on the private, fee charging dentist rather than any income differences between the two groups.*

Thirty-one percent of the eligibles thought they currently had a dental problem, with whites again slightly higher than blacks, p = .1383, and adults much higher than children, p = .0000. Most of the problems involved routine dental care, although 38 children cited orthodontia and 39 adults cited dentures. Recall that respectively 13 children and 11 adults had experienced an unmet need for orthodontic work and dentures. Presumably, the remainder (25 children and 28 adults) were in the process of obtaining these services at the time of the study, a rather surprising conclusion in light of their expense.

---

*Among the children who regularly saw a dentist, 20.0% of the whites and 10.8% of the blacks used a private dentist, p = .0335. The number of white adults who reported regular dental patterns was too small to enable any meaningful comparison.

TABLE 3-11. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE: ATLANTA AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that obtained glasses in 1972-73	7.0	10.6	6.7	4.8	8.3	4.5	14.3	18.8	13.9
Out-of-pocket expenses for last pair									
Percent*	67.2	73.3	66.4	53.7	66.7	51.7	82.0	83.3	81.8
Mean ($)*	44.70	41.30	45.20	46.10	50.30	45.20	43.70	30.40	45.20
Median ($)*	44.70	34.90	45.40	47.30	60.00	46.40	42.00	30.00	44.30
% that had an unmet need for glasses in 1972-73	14.0	15.6	13.9	8.6	9.2	8.5	32.0	37.5	31.6
% that had eye/vision care in 1972-73	21.4	31.9	20.5	18.8	27.5	18.0	29.7	46.9	28.3
Out-of-pocket expenses for eye/vision care									
Percent*	17.8	13.6	18.4	14.2	12.5	14.4	25.9	16.7	27.1
Mean ($)*	24.60	43.30	22.40	23.30	50.00	19.70	26.50	30.00	26.10
Median ($)*	17.00	33.20	14.50	15.70	60.00	14.00	23.50	30.00	17.00
% that had unmet need for eye/vision care in 1973	11.7	15.6	11.4	7.8	10.1	7.7	24.3	34.4	23.5

*See footnote to Table 3-2.

Vision and Hearing Care

Approximately 7.0% of the AFDC sample had obtained eyeglasses in either 1972 or the first half of 1973, a service which, in general, was not then provided under the Georgia Medicaid program. As shown in Table 3-11, eyeglasses had been procured by a much larger proportion of adults (14.3%) than of children (4.8%), a not unexpected finding in light of the increasing need for glasses with age (p = .0000). It should also be observed that in both the children and the adult categories a somewhat larger proportion of whites than of blacks had obtained glasses (p for children = .0373 and p for adults = .2229). There was little difference across the two family size categories.

These glasses were obtained from a wide variety of providers, with the adult eligibles relative to the children exhibiting a greater reliance upon eye glass companies/opticians (41.0 vs. 31.3%, p = .1266), and eye doctors propensity to use a public or an eleemosynary clinic (37.3% vs. 21.3%, p = .0239). With respect to the resources used for obtaining glasses, white-black differences could not be measured with very much precision due to the small number (15) of whites who had obtained glasses.

Self/family expenditure was by far the leading method of payment for glasses, having been cited by over 80% of the adults and over 50% of the children (Table 3-11). The mean expenditure was $44.70. Approximately 20% of the children and 15% of the adults reported that Medicaid paid for their last pair of glasses. The former figure undoubtedly reflects the partial implementation of the screening program among the children. During the 1972-73 reference period, glasses were covered for adults only in medical-surgical cases (e.g., postsurgical glasses for cataracts), so that it is quite likely that the adult percent contains a slight upward bias. This bias may be due to the "caseworker effect" and the provision of free glasses by various voluntary programs (see similar discussion with respect to dental care).

As shown in Table 3-11, 14.0% of the AFDC eligibles had experienced an unmet need for glasses in 1972-73, with the adults faring much worse than the children (32.0% vs. 8.6%, p = .0000). Thus, only 30.8% of the adults and 35.8% of the children who felt that they needed glasses actually obtained them. By race, there was very little difference among the children, but among the adults proportionally more whites than blacks cited such an unmet need, p = .2457. Almost one-third of these eligibles claimed that the glasses were prescribed by a doctor (family physician, an opthalmologist, or an optometrist). Lack of money (50.2%) was the most frequently cited barrier to obtaining the needed glasses. Since it was mentioned by only 1.6% of these eligibles, lack of transportation did not appear to be a major problem. Roughly 5% of those needing glasses claimed that they did not know where to obtain the glasses or that they had to wait too long for an appointment.

In both the children and the adult categories, a much larger proportion of whites than of blacks had received eye/vision care in 1972-73 (p, children = .0073 and p, adults = .0134, Table 3-11). Among both races, a much larger proportion of adults than of children had received such care, p, whites = .0192 and p, blacks = .0000 Most of the eligibles who went in 1973 received either a checkup (35.0%) or a diagnosis of a mechanical eye problem (38.4%).

The four principal sources of care were hospital emergency rooms or clinics (26.7%), other--largely school programs--(26.7%), private doctors (24.4%), and public or eleemosynary clinics (21.6%).

Only 17.8% of these eligibles cited an out-of-pocket expenditure for their last visit, another surprising result in light of the fact that at that time optometric care was excluded from the Georgia Medicaid package (Table 3-11).* Medicaid was reported as a payor by 52.9% of the eligibles who obtained vision care in 1973.

There were 214 (11.7%) eligibles who reported that they had experienced an unmet need for vision care in 1973 (Table 3-11). For the most part, these unmet needs related to mechanical rather than organic eye problems. Again, lack of money (46.0%) was the major barrier to obtaining the desired care.

As expected, the study revealed very little usage of hearing aids among the AFDC population. In Atlanta, only 4 (0.2%) AFDC eligibles reported that

---

*See earlier discussion on OAA and AD. In addition, this paradoxical finding is probably partially explained by the use of school dental programs by the children.

TABLE 3-12. UTILIZATION, OUT-OF-POCKET EXPENSE AND UNMET NEEDS FOR PHYSICIAN SERVICES:** ATLANTA AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	55.7	57.4	55.5	49.4	52.3	49.1	76.2	75.0	76.3
Out-of-pocket expense									
Percent*	7.6	12.0	7.2	6.6	6.7	6.6	9.5	28.0	8.0
Mean ($)*	12.50	13.10	12.40	12.90	10.50	13.20	12.00	14.60	11.30
Median ($)*	10.10	11.10	10.00	11.00	4.50	12.50	9.10	13.40	8.70
% that had an unmet need to see a physician in 1973	6.0	9.9	5.6	3.1	4.6	2.9	15.4	28.1	14.4

*See footnote to Table 3-2.
**Excludes inpatient hospital care and dental, vision, and hearing care.

they had a hearing aid and only 13 (0.7%) cited an unmet need for a hearing aid. Roughly 5% of the eligibles had seen a physician about an ear/hearing problem in 1973, but in almost all of these cases the visit concerned either a checkup or an ear infection (rather than any permanent or long-term hearing deficiency). Approximately2 percent of the eligibles claimed to have experienced an unmet need for such care, of which about half thought that they were suffering from a hearing loss.

Physician Services and Prescriptions

Table 3-12 shows the percent of eligibles that utilized physician services (excluding care rendered as a hospital inpatient and dental, vision, and hearing care), cross-classified by race and children/adult status. Over half (55.7%) of this AFDC sample reported that they had either seen or phoned a physician sometime in the first half of 1973. While the differences by race were rather small, the differences by children/adult status were very substantial in each race, p (black) = .0000 and p (white) = .0112. Although not shown in Table 3-12, family size had a significant impact upon the utilization of physician services by the children, a result which again can probably be largely attributed to age differences. As noted earlier, a much larger proportion of the children in the three or less family size category were one year old or younger and, hence, required periodic medical attention for checkups and immunizations.

Among those who saw a physician in the first half of 1973, the mean number of visits during that period was 3.1-4.15 among the adults vs. 2.60 among the children.

Going back to January 1972, over three-fourths of the AFDC sample had either seen or phoned a physician in the roughly 18-month period--72.1% of the children and 88.1% of the adults. This, coupled with the fact that 96.7% answered that they either had a regular physician or saw a physician when necessary, is indicative of a fairly high degree of accessibility to primary care services on the part of this AFDC population. Further substantiation of this claim is provided in Table 3-12. Only 6.0% of the eligibles reported that they had experienced an unmet need to see a physician in 1973 (although, admittedly, this problem was somewhat more acute among the adults, of whom 15.4% cited such an unmet need).

Twenty-three percent of the eligibles who had seen or phoned a physician in 1973 indicated that they had a condition which required regular medical attention. As expected, such chronic conditions were much more prevalent among the adults (45.1%) than among the children (12.6%), $p = .0000$. The conditions which were most commonly cited by these adults were hypertension (32.7%), coronary artery disease (15.0%), anxiety/nervous disorders (10.9%), and menstrual disorders (10.9%). Among these chronic children, bronchitis (16.1%), convulsive/epileptic disorders (9.2%), and skin allergies/eczema (8.0%) were the principal conditions. Among these chronic eligibles it was reported that approximately 30% usually received an injection during their periodic visits; 84% usually received a prescription; 11.5% frequently were given free samples; and 6% were often urged by the physician to purchase some nonprescription medication for their condition(s).

Among the eligibles whose last physician visit in 1973 was not related to a chronic condition, the issuance of prescriptions was much less frequent. Only 48% indicated that they had received a prescription on their last visit, in contrast to 84% of the chronically ill, a not particularly surprising result. The proportions that were given an injection, received a free sample, or were advised to purchase some nonprescription medication did not differ substantially from those in the chronic cases.

Physician services being one of the federally mandated benefits, Medicaid was by far the preponderant method of payment. Combining the chronic and nonchronic cases, 83.7% of the eligibles who had visited a physician in 1973 reported that their last visit (or that their typical visit) was handled by the Georgia Medical Assistance Program. As indicated in Table 3-12, only 7.6% incurred an out-of-pocket expense for their last (or their typical) visit, the mean outlay having been $12.52.

An examination of the primary care utilization patterns shows that Grady Hospital continues to play a central role in the delivery of health care services to Atlanta's indigent population, particularly the children and the blacks. Of the eligibles who had seen a physician in 1973, 53.8% used a hospital emergency room or outpatient clinic on their last (or typical) visit. As additional evidence of this situation, note that approximately 60-65% of the eligibles who either had a regular doctor or usually saw a doctor when necessary, named Grady as their regular source of care. It was only among the white adults that the private physician emerged as the most common source of ambulatory care. Among the black children, the black adults, and the white children, the private physician was a distant second to Grady. Overall, 6.7% usually employed a nonprivate clinic for their outpatient needs. Many, if not most, of these were referring to the O.E.O.-sponsored Atlanta Southside Comprehensive Health Center. Since the Southside Clinic is located in a predominantly black area, it is not surprising that all but one of these eligibles was black.

TABLE 3-13. ISSUANCE, OUT-OF-POCKET EXPENSES, AND FILLING OF PRESCRIPTIONS: ATLANTA AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	31.5	37.6	31.0	25.7	33.0	25.0	50.7	53.1	50.5
% of eligibles that failed to fill or refill as needed*	9.4	13.2	9.0	7.8	13.9	7.1	12.0	11.8	12.0
Out-of-pocket expense for prescriptions									
Percent**	33.0	52.3	31.4	28.6	44.8	27.3	44.1	73.3	41.7
Mean ($)**	10.00	15.20	9.20	7.20	16.30	5.70	13.90	13.30	14.00
Median ($)**	4.10	4.60	4.00	3.40	7.70	3.30	6.50	3.70	7.00

*This percentage is based on the eligibles that received at least one prescription in 1973.
**See footnote in Table 3-6.

As already noted, only 6.0% of the AFDC sample reported that they had experienced an unmet need to see a physician in the first half of 1973 (Table 3-12). A greater proportion of adults than of children and of whites than of blacks had felt such a need, p (children/adult) = .0000 and p (black/white) = .0189. Among these eligibles, lack of money (or lack of Medicaid coverage) was the principal barrier (27.5%), a result which to some extent perhaps reflects an ignorance of the services which are provided under Medicaid. (Other possible explanations include insufficient funds for transportation, the use of a physician who does not participate in Medicaid, and ineligibility at the time of the unmet need.) Transportation difficulties were adduced by 20.2% of these eligibles as an obstacle to accessibility. However, in light of the fact that less than 2% of the total AFDC sample had an unmet need which they attributed either to a lack of money or a lack of transportation, these should not be seen as substantial barriers to accessibility to this population.

Forty-one percent reported that they had received a general checkup since the beginning of 1972--37% of the whites and 47% of the blacks; 43% of the children and 53% of the adults. (As previously noted, these figures may contain some upward bias because of varying definitions of a general checkup.)

As can be seen from Table 3-13, the filling of prescriptions did not appear to be a major problem for most of the AFDC eligibles. Of those who were issued at least one prescription in the first half of 1973, roughly 90.6% had all of them filled and refilled as needed. Furthermore, of the remainder, 22.2% stated that they did not have all of their prescriptions filled and refilled as needed because they were not sick enough. Lack of money was blamed by less than one-third of these eligibles.

Over four-fifths (81.5%) of the eligibles who had ever received a prescription stated that they were usually paid for by Medicaid, but 33.1% indicated that they usually incurred at least some out-of-pocket expense in filling their prescriptions. In light of these apparently contradictory statistics, it is conceivable that some pharmacists are charging a nominal fee in addition to submitting a claim to Medicaid.* The data also reveal some ignorance of the fact that, in Georgia, Medicaid covers prescriptions. Over half (58.4%) of the eligibles who usually paid for the medication themselves stated that Medicaid would not pay for it, and 22.5% answered that they did not know. It is likely that this ignorance is more prevalent among the whites, since 52.3% of them typically had an out-of-pocket expense in contrast to 31.4% of the blacks, p = .0000 (Table 3-13).

Blacks and whites had rather distinct patterns with respect to the sources they used to fill their prescriptions. While the majority (63.0%) of blacks relied upon a hospital pharmacy (almost always, Grady), almost three-fourths (72.5%) of the whites used a private drugstore. There was also a slight tendency for the children to use Grady's pharmacy proportionally more than did the adults. Here again, the critical role played by Grady in meeting the health care needs of the poor, particularly, the black poor, is observed.

Almost half (49.4%) of the AFDC sample were currently using some nonprescription medication--66.0% of the whites and 48.0% of the blacks, p = .0000. Of these, 11.6% indicated that the medication was recommended by a physician--30.1% of the whites and 9.5% of the blacks, p = .0000.**Among the eligibles who currently were using nonprescription medication, the mean expense for such medication in the first half of 1973 was $8.89.

Home Health Care, Family Growth and Planning, and General Health Status

As expected, none of the home health care services were utilized by a very large proportion of the AFDC sample. Only 4.3% indicated that they had received any of these services, for the most part that of a visiting nurse. Furthermore, less than 1% of the eligibles felt that they currently needed any of these services.

Only 17 (0.9%) eligibles reported that they had used either walkers or crutches in the previous 18-month period; only 4 (0.2%), that they had experienced an unmet need for one of these devices in the same period.

Almost half (48.2%) of the female eligibles between the ages of 13 and 50 were either currently pregnant or had been previously pregnant within the past five years--49.0% of the blacks and 39.6% of the whites. It is of interest to note that 37.2% of the female children (under age 21) either were currently or previously had been pregnant.

The data suggest that the AFDC eligibles had fairly ready access to prenatal, postnatal, and neonatal care. Over 96% of the women whose last baby was born in either 1972 or 1973 reported that that baby had been delivered by a physician.

---

*Another possible explanation might be that some of these eligibles confused prescription and nonprescription medication, the latter, of course, not being covered by Medicaid.

**See footnote, p. 33.

TABLE 3-14. SUBJECTIVE HEALTH RATINGS: ATLANTA AFDC ELIGIBLES

Rating	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
Percent									
Excellent	14.0	22.7	13.3	16.4	28.4	15.4	6.1	3.1	6.3
Good	59.4	47.5	60.4	65.9	49.5	67.2	38.1	40.6	37.9
Average	20.8	20.6	20.8	15.6	14.7	15.7	37.9	40.6	37.6
Poor	5.7	9.2	5.4	2.0	7.3	1.5	18.0	15.6	18.2

Approximately 61% and 94%, respectively, had received regular prenatal care during the first and third trimesters of this last pregnancy, and 88.5% had received some neonatal care.

Fourteen percent of the women who had been pregnant within the past five years reported that their last pregnancy did not result in a live birth, of which half had an abortion and approximately one-third a miscarriage.

Only 13% of the women who either were currently or previously had been pregnant within the past five years planned to have more children. Approximately 62% of these eligibles had received professional birth control advice some time in their lives--70.8% of the adults and 46.8% of the children. Once again, Grady Hospital emerged as the principal provider of care to the indigent. Over 70% of the eligibles who had received professional family planning advice stated that they had obtained it at a hospital emergency room or clinic (although among th whites the private physician was the most frequently cited source of such information). Most of this care was provided free, with only 7.0% citing a charge, for which the majority paid themselves. Less than 3% of the women claimed that they had desired, but were unable to obtain, professional birth control advice, a result which provides further testimony to the high degree of accessibility to this information enjoyed by most AFDC eligibles.

The subjective health ratings are presented in Table 3-14. While very few of the children were considered to be in "poor" health, almost one-fifth of the adults received such a rating. The reasons cited varied considerably.

The health care services available to these eligibles were generally thought to be acceptable. Less than 4% of the eligibles* rated these services poor, of whi 25% claimed they had to wait too long to obtain the care and 15% thought that the quality of care was poor. The majority* (54.8%) of eligibles could not think of any additional services from which they and their families could benefit, while 25% and 11% respectively complained of the lack of coverage for dental and eye/vision care. Six percent felt that they could benefit from an improved accessibility of services, and 3.5% desired a broader choice of physicians. Thus, with the notable exceptions of dental and eye/vision care, it appears that the vast majority of the AFDC sample thought that they had fairly good access to acceptable or high quality health care services. In general, they appeared moderately pleased with both the availability and delivery of such care.

---

*The questions were asked of the head of the family, not of the individual. In the coding, each individual in the family was given the rating that the respondent gave for the family.

CHAPTER 4

A PROFILE OF THE HEALTH CARE BEHAVIOR PATTERNS OF LITTLE ROCK PUBLIC ASSISTANCE RECIPIENTS

The Setting

The Little Rock survey encompassed all of Pulaski County (see Chapter 2). While the vast majority of the sample eligibles were from the Little Rock-North Little Rock metropolitan area, there were a few who lived in the somewhat rural perimeter of the county. Thus, such small cities and towns as Jacksonville, College Station, Genevia, Woodson and Scott, among others, were also represented in the sample. This, notwithstanding, the sample can be considered, for the most part, to be highly urban and, in this respect, comparable to those conducted in the other three sites.

At the time of the survey, the Arkansas Medicaid program provided very limited coverage of the major optional services. Prescriptions were not provided except in glaucoma cases, where medications were furnished on a prior approval basis. Dental care (including dentures) was covered for both children and adults, although prior approval was required for restorative work and orthodontia. With respect to visual care services, children enjoyed rather comprehensive coverage, including screening, refractions and examinations, cataract surgery and glasses. Adults, however, were not so fortunate. Their coverage was limited to presurgical and postsurgical examination, surgery and glasses for cataract patients only. Outpatient physician visits were limited to eighteen per year, beyond which prior approval was required.

While there were several pockets of poverty scattered throughout Pulaski County, the hard core poverty area was in the so-called "East End" of Little Rock, a predominantly black community. Like many other similar communities across the county, the East End suffered from an acute shortage of providers. All of the major hospitals were located in the western half of the city, and there were very few, if any, private physicians in this blighted area. In addition, public transportation was alleged to be very poor. The East End Model Cities Health Clinic served as a major source of health care for these people, but it was confronted with a serious financial crisis which necessitated a cutback in services. For example, prescribed medications, which formerly had been furnished through the clinic's pharmacy, were no longer supplied to patients. Furthermore, the East End Clinic did not supplement Medicaid through the free provision of eyeglasses and hearing aids.

Indeed, there were few resources available to the eligibles through which they could obtain the uncovered optional services. There was a Children and Youth Comprehensive Health Care Project which covered a large part of Little Rock and North Little Rock, but it also had financial problems and, consequently, had been able to enroll only 25% of its target population of 31,000. The Pulaski County Social Service Department and several small voluntary/religious organizations (e.g., the Lions' Club) occasionally assisted a client in obtaining glasses or medications, but here, too, funds were very limited and hardly adequate to meet the needs of all the eligibles.

Thus, based upon available information, there was reason to believe that accessibility constituted a fairly severe problem in the Little Rock-North Little Rock area, both with respect to covered and uncovered services. The major poverty area--the East End of Little Rock--was plagued by a critical shortage of providers, and the few programs which did exist were severely constrained by financial problems.

AD and OAA Eligibles

Demographic Characteristics

Data were collected and tabulated on a total of 102 AD and 316 OAA eligibles in Little Rock. Table 4-1 presents these subpopulations cross-classified by the following demographic variables: sex, age, education, marital status and living arrangement. Among the 102 AD recipients, 52 were black and 50 were white. Females outnumbered males by nearly two to one in the AD category, with most women beyond the effective child-bearing age range. Roughly one-quarter of the AD sample was married and exactly half of the group lived alone. Some form of health insurance coverage (not including Medicare) was claimed by eleven 10.8% AD eligibles.

Among the OAA individuals surveyed, most were white (53.1%), female (77%), not married (77%), and lived alone (69%). The split between the two age categories of 65-74 and 75 and over was almost even. Nearly all were Medicare beneficiaries (88%), but only 27% claimed to have private health insurance coverage.

It is interesting to note that the divorce rate was almost three times as great among the AD as among the OAA (17.9% v. 6.0%, p = .0000). This may reflect an important social consequence of disability--inability or unwillingness of a spouse to cope with or be tied down by a disabled mate.

Hospitalization and Nursing Home Care

The hospital admission rate of the AD eligibles was slightly lower per 100 eligibles than that of the OAA for the reference period (45.1 v. 49.4)* despite the fact that the proportion of eligibles who had been hospitalized during the period was almost identical for both groups (see Table 4-2). Despite this conformance, AD patients tended to be confined longer once admitted to a hospital--17.0 days v. 14.4 days. Assuming the length of stay for the most recent hospitalization to be typical, total number of inpatient days per 100 eligibles was about 8% higher for the AD category during the period.

Over 72% of the AD eligibles hospitalized during 1972-73 cited Medicaid as the principal method of payment for their last admission. Two persons each cited other health insurance and Medicare, while three cited self/family as the

---

*Admission rates and total number of inpatient days statistics are based on the roughly 18-month reference period from January 1972 to summer 1973.

4-1. SELECTED DEMOGRAPHIC CHARACTERISTICS: LITTLE ROCK OAA AND AD ELIGIBLES*

	OAA Total			OAA, 65-74			OAA, over 75			AD		
Characteristic	T	W	B	T	W	B	T	W	B	T	W	B
Sex												
% male	23.1	20.2	26.4	24.3	21.7	26.6	22.0	19.2	26.1	36.8	42.3	31.5
% female	76.9	79.8	73.6	75.7	78.3	73.4	78.0	80.2	73.9	63.2	57.7	68.5
Age												
% 44 or less	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.1	34.5	29.7
% 45-64	2.5	2.4	2.7	4.1	4.3	3.8	1.2	1.0	1.4	57.6	57.7	57.4
% 65-74	45.9	40.5	52.0	95.3	94.2	96.2	2.4	3.0	1.4	10.3	7.7	13.0
% 75 and over	50.6	56.5	43.9	0.7	1.4	0.0	94.6	95.0	94.1	0.0	0.0	0.0
Education												
% none	7.0	5.4	8.8	4.7	4.3	5.1	8.9	6.1	13.0	7.5	7.7	7.4
% Grades 1-6	41.5	31.5	52.7	42.6	33.3	50.6	40.5	30.3	55.1	34.9	25.0	44.4
% Grades 7-12	40.2	51.8	27.0	45.9	56.5	36.7	35.1	48.5	15.9	50.0	53.9	46.3
% post high school	3.8	3.0	4.7	3.4	2.9	3.8	4.2	3.0	5.8	2.8	5.8	0.0
Marital status												
% married	23.1	25.0	20.9	22.3	23.2	21.5	23.8	26.3	20.3	24.5	25.0	24.1
% not married	76.9	75.1	79.1	77.8	76.7	78.5	76.3	73.8	79.7	74.5	75.0	74.1
Living arrangement												
% living alone	69.0	66.1	72.3	73.0	68.1	77.2	65.5	64.6	66.7	50.0	57.7	42.6
% not living alone	31.0	33.9	27.7	27.0	31.9	22.8	34.5	35.4	33.3	50.0	42.3	57.4
Total number of eligibles	316	168	148	148	69	79	168	99	69	102	50	52
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(2)	(2)

*See footnotes to Table 3-1.

source of payment, this combination accounting for just over 20% of the total number hospitalized. For the three who did have expenses, however, they were substantial (mean = $266.70). Among the OAA, 20% (18 persons) recalled having out-of-pocket expenses for their last hospital visit (mean = $84.40).

Interestingly, the proportion of OAA hospitalized whites who had out-of-pocket expenses was over two and one-half as great as among blacks. In the AD category a similar, though less pronounced (just less than double) pattern appeared. Moreover, this same pattern is present among the OAA in Little Rock for dental and physician services, while for eye/vision care and prescriptions about the same proportion of blacks and whites incurred personal expenses. Among the AD, the pattern holds except for physician services and prescriptions. No clear explanation for this behavior is available, but one could speculate, among other things, that whites in Little Rock are either less well-informed about their eligibility for Medicaid or, for some reason, less willing to take advantage of it. In any case, not too much should be made of this point because of the relatively small numbers involved.

Medicare and Medicaid were each cited by 60% or more of the recently hospitalized OAA recipients as the method of payment for the last visit, but it was distressing not to find a greater percentage of these eligibles taking advantage of this mandatory Medicaid benefit. Even assuming that the Medicare

TABLE 4-2. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE:* LITTLE ROCK OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% hospitalized in 1972-73	28.5	31.0	25.7	29.1	30.4	27.8	28.0	31.3	23.2	28.4	32.0	25.0
Number of admissions per 100 eligibles in 1972-73	49.4	53.0	45.3	43.9	49.3	39.2	54.2	55.6	52.2	45.1	46.0	44.2
Mean length of stay on last admission	14.4	14.7	13.9	13.4	14.2	12.6	15.3	15.0	15.8	17.0	14.6	19.9
Total number of inpatient days per 100 eligibles	711.4	779.1	629.7	588.3	700.1	493.9	829.3	834.0	824.8	766.7	671.6	879.6
Out-of-pocket expense												
Percent	20.0	26.9	10.5	18.6	23.8	13.6	21.3	29.0	6.2	10.3	12.5	7.7
Mean ($)	84.50	81.90	95.00	145.70	165.00	97.50	36.70	30.00	90.00	266.70	312.50	175.00
Median ($)	50.00	35.00	90.00	75.00	70.00	107.50	26.30	22.50	90.00	175.00	400.00	175.00

*See footnotes to Table 3-2.

and Medicaid groups were not exactly parallel, it appears that over 20% of the users of hospitals were not aware of their coverage, or, possibly, were not eligible at the time of their hospitalization (e.g., turned 65 just recently).

Nursing home utilization--having eliminated permanent residents from the sampling frame--was too slight to be analyzed.

Dental Care

A summary of the dental care patterns and needs of OAA and AD sample eligibles is presented in Table 4-3. Again, a substantially higher proportion of the AD eligibles had established a regular dental care pattern (p = .0000), had seen a dentist at least once during the previous 18 months (p = .0014), had experienced an unmet dental need during this same period (p = .0079), and had a dental problem at the time of the interview (p = .0457). It is likely that the much greater incidence of dentures among the OAA group is the major causal factor for these differences.

A much larger proportion of blacks than of whites in each assistance category attributed failure to see a dentist regularly to a lack of perceived need (for the OAA: 9.9% white v. 25.0% black, p = .0002; for the AD: 9.5% white v. 51.2% black, p = .0000). In contrast, many more whites in both welfare categories cited dentures as a reason for their behavior (for OAA: 70.4% white v. 45.1% black, p = .0000; for AD: 42.9% white v. 18.6% black, p = .0075). Among the OAA, it was again found that age had virtually no influence on this pattern.

TABLE 4-3. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:* LITTLE ROCK OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	3.2	3.6	2.7	4.1	5.8	2.5	2.4	2.0	2.9	16.7	16.0	17.3
% saw a dentist in 1972-73	14.5	11.9	17.6	17.6	18.8	16.5	11.9	7.0	18.8	27.5	24.0	30.8
Out-of-pocket expenses												
Percent	54.3	75.0	38.5	50.0	76.9	23.1	60.0	71.4	53.8	35.7	50.0	25.0
Mean ($)	55.10	65.40	40.70	67.20	74.90	44.00	43.00	48.20	39.30	10.80	11.70	9.50
Median ($)	26.70	32.20	14.50	60.00	65.00	30.00	14.50	17.00	12.00	8.30	7.70	9.50
% that had an unmet dental need in 1972-73	21.5	16.7	27.0	24.3	23.2	25.3	19.0	12.1	29.0	33.3	34.0	32.7
% that had current dental problem	26.6	21.4	32.4	31.1	30.4	31.6	22.6	15.2	33.3	35.3	38.0	32.7

*See footnotes to Table 3-3.

Since dentures were more often reported by whites than blacks, it might be expected that more blacks would have seen a dentist in 1972-73. This, in fact, was the case (p for OAA/total = .0759; p for AD = .2209) except in the OAA 65-74 subpopulation. Here, it might be supposed that the higher level of use of dentures by whites could reflect an initial taking advantage of OAA/Medicaid eligibility for the purpose of having dentures fitted.

Interestingly, despite a fairly consistent pattern of a higher proportion of blacks than of whites having unmet dental needs, current dental problems and dental visits during 1972-73, the proportion of blacks and whites claiming regular dental visits did not exhibit the same pattern across all subpopulations.

For a general discussion of racial patterns as they apply to dental care, refer again to Chapter 3, above.

As was also noted in Chapter 3, there is an apparent underreporting of dental visits in both aid categories for the year 1972, an outcome which reflects a not unexpected recall problem.

Extractions were by far the most common reason for a dental visit for both welfare categories, with dentures and cavity repair being the next most common reason for OAA and AD, respectively. Despite the fact that dental care was covered by the Arkansas Medicaid program at the time of the survey, only 43.5% of the OAA and 53.6% of the AD users of dental care had their last visit paid for by the program; furthermore, 54.3% of the OAA and 35.7% of the AD incurred out-of-pocket expenses, the respective medians being $26.70 and $7.70. The much higher cost among the OAA undoubtedly reflects the cost of denture work.

Roughly half again as many AD recipients as OAA eligibles cited unmet dental needs and current dental problems. The most frequently cited problems among the AD were toothaches and required extractions, whereas dentures and extractions headed the list for the OAA.

An overwhelming majority in both groups (70.6% AD; 61.8% OAA) cited lack of money as the reason for not seeing a dentist when needed. This seems to reflect a tragic degree of ignorance of available benefits. Over the entire sample, not just those citing an unmet need, 13.3% of the OAA and 25.5% of the AD blamed failure to obtain care on a lack of money--despite most dental services being covered. Reverting to just those who cited an unmet need, about 20% in each category cited either fear or not sick enough as their reason. Among the elderly, however, lack of transportation was given as the deterrent in nearly 15 percent of the cases.

Vision and Hearing Care

Both OAA and AD eligibles reported substantial use of vision care services as well as a significant level of unmet needs (Table 4.4). Among the elderly, over one-fifth obtained eyeglasses during the 18-month recall period, while almost one-third utilized vision care services in general. Despite the high use level, however, a third or more of the respondents over age 65 claimed unmet needs for glasses and vision care services. For the AD, a very similar pattern was manifested, with only slight variations, e.g., slightly fewer obtained glasses, while more received vision care services. Roughly 30%-40% of those who had experienced unmet need for glasses indicated they had been prescribed by a doctor. Among both groups, lack of money was cited by an overwhelming majority as the reason for not obtaining needed care.

Lack of adequate coverage for vision care services by the Arkansas Medicaid program is further reflected in the large percent of individuals who incurred out-of-pocket expenses for such services, ranging from a high of 91.3% for OAA purchasers of eyeglasses to a low of 54.5% of AD recipients who obtained other eye care. For the most part, related out-of-pocket expenditures averaged in the $40-$60 range--a rather significant expense for welfare recipients.

Among the OAA there were no appreciable differences by race in the proportion who encountered out-of-pocket expenses, but blacks consistently reported higher levels of unmet need both for glasses ($p = .0818$) and for other vision care ($p = .0112$).

In the AD sample, a much larger proportion of blacks than of whites reported out-of-pocket costs for glasses, but the reverse was true for vision care services; however, whites reported higher levels of unmet needs in both areas (p glasses = .2864; p other vision care = .1155).

For both glasses and vision care services, consistently more whites than blacks had obtained care at some time, and this held true for all subpopulations both during the reference period and prior to January 1, 1972. While the differences were not always of great magnitude, they were consistent enough to suggest possible merit in an epidemiological study to determine the cause.

TABLE 4-4. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE:*
LITTLE ROCK OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that obtained eyeglasses in 1972-73	21.8	22.0	21.6	21.6	21.7	21.5	22.0	22.2	21.7	16.7	22.0	11.5
Out of pocket expenses												
Percent	91.3	91.9	90.6	87.5	93.3	82.4	94.6	90.9	100.0	70.6	63.6	83.3
Mean ($)	48.10	49.30	46.70	44.30	45.70	42.80	51.10	51.80	50.10	48.40	46.70	50.40
Median ($)	50.30	50.00	50.70	47.30	45.70	48.70	53.60	54.30	52.90	50.00	46.70	55.00
% that had an unmet need for glasses in 1972-73	33.2	29.8	37.2	35.1	33.3	36.7	31.5	27.3	37.7	37.3	40.0	34.6
% that obtained eye/vision care in 1972-73	32.9	36.9	28.4	31.0	37.6	25.4	34.5	36.3	31.9	27.5	32.0	23.0
Out-of-pocket expenses												
Percent	65.9	68.2	63.2	55.6	55.6	55.6	73.9	76.9	70.0	54.5	80.0	33.3
Mean ($)	42.30	46.90	35.50	39.00	41.40	36.00	44.20	49.60	35.20	31.80	36.70	12.00
Median ($)	48.70	54.00	40.00	46.00	47.50	40.00	53.30	63.30	40.00	26.70	30.00	12.00
% that had an unmet need for eye/vision care in 1973	38.0	32.1	44.6	39.9	33.3	45.6	36.3	31.3	43.5	32.4	38.0	26.9

*See footnotes, Table 3-4.

Mechanical eye problems were cited as the most prominent reason for the last visit to the eye doctor by both OAA and AD respondents; cataracts were also prominently mentioned by OAA.

The lack of supplemental programs for vision care in Little Rock is reflected by the sources of care. Over 90% of the OAA and over 63% of the AD got their treatment in a private doctor's office or private clinic. Among the AD, just over a quarter of the total obtained their care through a hospital emergency room or clinic. Roughly four-fifths of those in both aid categories who obtained glasses during the recall period also listed a private physician or clinic as the source.

No AD recipients in the Little Rock sample reported having a hearing aid, and less than 6% (6 individuals) reported an unsatisfied need for one. None of these six individuals, however, had had a doctor prescribe a hearing aid, a fact which makes at least slightly suspect the claim of an unmet need.

Among the OAA, 6.3% (20 individuals) reported having a hearing aid, and 34 persons, presumably a largely distinct group, reported a current unmet need for one. Only three of the latter group, however, reported having a doctor's prescription for the hearing aid.

There were extremely sharp and persistent differences among the races on the matter of hearing aids in all of the subpopulations. For example, among all OAA recipients, 17.0% either had or had a stated need for such a device; among the whites, however, this broke down to 27.8%, while among blacks there were only 6.1% (p = .0000). As expected, there was at least a slight correlation between age and the need for a hearing aid.

For ear/hearing problems in general, levels of use were very low--never exceeding 6.1% (white over 75) in any subpopulation during either 1972 or 1973. The level of unmet need for seeing an ear doctor was somewhat higher, ranging as high as 20.3% among white OAA recipients between 65-74. In most cases, the general complaint "loss of hearing" was cited as the basis of need and lack of money was given as the reason for not seeking treatment. The racial pattern described in connection with hearing aids also persisted for general hearing needs.

In a sense, failure to provide coverage for hearing problems appears to produce more of a social than a medical problem--i.e., less than 3.5% of all OAA eligibles interviewed mentioned an unmet need that did not relate directly to the simple need for a hearing aid; for the AD, not a single respondent fell in this category.

Physician Services and Prescriptions

Ambulatory care patterns among OAA and AD eligibles are summarized in Table 4.5. As can be seen, there was little difference between the groups in terms of the proportion that saw or phoned a physician, or the number citing an unmet need for physician services. There was a substantial difference, however, in the proportions who encountered out-of-pocket expenses, even though the level of expenditure was comparable. Some racial differences were noticeable, however, especially with regard to out-of-pocket expenditures. Among the OAA, 41.5 of the whites and only 24.1% of the blacks (p = .0052) encountered such costs. In the AD grouping, more blacks (28.6% v. 20.0%, p = .2008) paid directly for these visits.

No differences of consequence existed between the races with respect to chronic v. nonchronic conditions as the reason for seeing a doctor, but chronic conditions were more prevalent among AD eligibles who had seen a physician in 1973 than among their OAA counterparts (77.3% v. 61.5%). However, among those who did see a physician after January 1, 1973, the mean number of visits was almost identical for OAA and AD (approximately 4).

Among those reporting chronic health problems, hypertension and coronary artery disease were by far the most prevalent conditions in both assistance categories. Both of these conditions, especially hypertension, were consistently more common among blacks. At much lower levels of frequency, whites evidenced a consistently higher incidence of kidney and other urinary disorders.

The large majority of respondents with chronic conditions usually were treated in a private doctor's office, with hospital emergency rooms/clinics a very distant second. Somewhat surprisingly, there were no differences of consequence along racial lines in this regard. Just over one-third of the chronic eligibles in both assistance categories reported that they usually received an

TABLE 4-5. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR PHYSICIAN SERVICES:* LITTLE ROCK OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	59.2	60.7	57.4	60.1	68.1	53.2	58.3	55.6	62.3	64.7	66.0	63.5
Out-of-pocket expenses												
Percent	33.7	41.5	24.1	35.9	42.0	28.6	31.7	41.1	20.0	24.3	20.0	28.6
Mean ($)	14.40	14.30	14.60	15.30	15.20	15.40	13.40	13.30	13.40	15.10	9.30	20.20
Median ($)	12.00	10.90	13.40	12.60	11.70	15.80	11.10	10.90	12.60	11.60	9.90	13.20
% that had an unmet need to see a physician in 1973	20.6	22.6	18.2	18.2	20.3	16.5	22.6	24.2	20.3	19.6	18.0	21.2

*See footnotes to Table 3-5.

injection during their periodic visits; this was true almost twice as often among blacks as compared to whites in the OAA category, but there was virtually no racial difference among the AD. This pattern may well be partially related to the greater incidence of hypertension among blacks, although this by no means accounts for the full difference. Nearly 90% of the OAA and about 80% of the AD typically received prescriptions (little variation by race).

Surprisingly, administration of an injection during the last or typical office visit was at about the same level for those with nonchronic ailments as for chronic, with the same racial patterns again present. Only 60% of nonchronic OAA and 74% of nonchronic AD visits led to prescriptions, however, and no clear racial pattern was discernible here.

Just over 50% of all OAA eligibles using physician services (chronic and nonchronic) had them paid for via Medicaid, and of those who did not, about 90% of the chronically ill and 75% of the others either said "no" or "don't know" when asked if Medicaid would have paid. This suggests either a tragically low level of knowledge about the program benefits among eligibles or possibly a low participation in the program by providers, though the latter possibility could not be confirmed by responses to the survey. Note that roughly 40% of the chronic and nonchronic elderly cited Medicare as the source of payment for their last doctor's visit; however interviewers reported some skepticism about the ability of respondents to distinguish between Medicare and Medicaid.

Over 70% of all respondents in these two categories claimed to have a regular doctor or group of doctors, with whites showing a persistently greater tendency to have such regular arrangements. Nevertheless, among those who did not claim a regular physician, just over 77% of both races (OAA) claimed to usually go to a doctor when necessary. Among the AD group, the percentage was even higher, with more whites than blacks responding positively--but the numbers were small.

Among those who failed to see a doctor when needed, those who were afraid or not sick enough balanced out those who lacked money or transportation (often, money-related).

Approximately 71% and 80% of the OAA and AD, respectively, reported having had a physical examination within the previous 18-month period. As noted in Chapter 3, however, this is probably overstated because of inconsistent and loose definitions among the respondents of what constitutes a checkup.

Over 90% of the OAA beneficiaries who received prescriptions in 1973 were able to fill and refill them as needed, though this figure dropped to only about 75% for AD eligibles (Table 4.6). These figures are relatively encouraging given the fact that Arkansas Medicaid provided virtually no coverage for prescriptions. Furthermore, while about 96% of the OAA eligibles who received prescriptions incurred some out-of-pocket expenses in filling them, not a single person in the group listed lack of money as a reason for not filling a prescription. In fact, the most common reason cited was a simple "not sick enough." Evidently the indifference curves of the elderly placed a low priority on these medications. Among the AD group, lack of money was cited by 40% as the reason for not filling prescriptions, but the numbers were too small to permit firm inferences.

Some interesting, though apparently insignificant, racial patterns are also reflected in Table 4.6. Among the OAA, for example, proportionally more whites received prescriptions and more whites incurred out-of-pocket expenses in both subpopulations, but the differences were very slight. At the same time, however, very substantial differences (though on a small base) existed in the proportion who failed to fill or refill needed prescriptions. In addition, the mean expenditure incurred for prescriptions during 1973 was markedly higher for white than for black eligibles. For the AD group, the difference in mean out-of-pocket expenditure for prescriptions was in the same direction, and whites maintained a margin over blacks in both the proportion that received prescriptions and the proportion who incurred out-of-pocket expenses. This pattern was disturbed only by the fact that a slightly larger proportion of AD blacks than whites failed to have needed prescriptions filled and refilled.

The three conditions cited most frequently by OAA blacks for the use of prescription drugs were hypertension, coronary artery disease and gastrointestinal disorders--with hypertension almost equalling the combined total of the other two. Among whites, conditions requiring prescriptions were more diverse, with hypertension again ranking first, but only by a very narrow margin over nervous disorders and five other conditions which tied for third place.

Of those who incurred out-of-pocket expenses, approximately three-fourths of both OAA and AD eligibles correctly noted that Medicaid would not pay for their prescriptions. Virtually all of the others responded "don't know" when asked this question.

Respectively, 71.8% of the OAA and 63.7% of the AD samples were currently using nonprescription medications, with virtually no racial differences in the proportions. In both categories, more whites than blacks had had the nonprescription drugs recommended by a physician, but over all subpopulations considered, in excess of 72% had self-prescribed the nonprescription medicines. Once again, whites consistently spent more than blacks for these medications.

TABLE 4-6. ISSUANCE, OUT-OF-POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:*
LITTLE ROCK OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	43.4	44.0	42.6	43.9	44.9	43.0	42.9	43.4	42.0	37.3	40.0	34.6
% that failed to fill or refill as needed	9.5	14.9	3.2	6.2	12.9	0.0	12.5	16.3	6.9	26.3	25.0	27.8
Out-of-pocket expenses												
Percent	96.1	98.2	93.1	95.5	100.0	90.6	96.6	96.9	96.2	84.3	88.6	80.0
Mean ($)	63.50	70.60	53.10	62.80	74.70	49.70	64.10	67.60	57.40	70.30	85.00	56.40
Median ($)	41.80	44.20	33.70	41.10	43.00	39.00	42.50	45.00	31.00	31.70	32.40	30.50

*See footnotes to Table 3-6.

Home Health Care and General Health Status

Home health care services did not seem to be much of a factor in Little Rock. Between the two assistance categories, OAA had the highest proportion of use, and it was less than 6%. Three-fourths or more of the home health services used in both assistance categories took the form of visiting nurse services, and more blacks than whites used these services; the small numbers involved, however, preclude detailed analysis. Roughly 10% of both assistance categories cited unmet home health care needs, and among the OAA, whites predominated in this area. Visiting nurse service was the overwhelming choice as the most needed service, with almost a three to one margin over the second choice--shopping/housekeeping/babysitting. Lack of money and ignorance as to the sources of such care were the two major obstacles cited.

Roughly 17% of the OAA and 13% of the AD had used walkers or crutches during the previous eighteen months. Between 40%-50% of these had paid for them personally, and only about 3% claimed unmet needs for these devices.

The subjective health ratings of OAA and AD recipients are presented in Table 4.7. Over one-third of the OAA and nearly half of the AD eligibles considered their health to be poor ($p = .0569$). The leading reasons for this poor rating were frequent illness, heart trouble, high blood pressure, and physical incapacities/limits among the OAA. Heart trouble, physical incapacity and nerves were the leading reasons for AD eligibles.

Somewhat anomalous was the fact that less than 10% in all subpopulations rated available family health services as poor. Most frequently cited complaints in both assistance categories were uncovered services and "services too expensive." When asked to identify additional medical services most desired, coverage of prescription and nonprescription drugs was mentioned by about one-fourth of the

TABLE 4-7. SUBJECTIVE HEALTH RATINGS: LITTLE ROCK OAA AND AD ELIGIBLES

Rating	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
Percent												
Excellent	4.7	3.6	6.1	3.4	1.4	5.1	6.0	5.1	7.2	2.0	2.0	1.9
Good	22.8	16.1	30.4	23.0	14.5	30.4	22.6	17.2	30.4	11.8	18.0	5.8
Average	35.1	38.7	31.1	35.8	40.6	31.6	34.5	37.4	30.4	40.2	38.0	42.3
Poor	37.3	41.7	32.4	37.8	43.5	32.9	36.9	40.4	31.9	46.1	42.0	50.0

sample group. Next most popular choice was the free provision of eye care and glasses--mentioned by over 9% of the OAA and over 6% of the AD eligibles. Nevertheless, roughly 48% of both assistance category respondents claimed that no additional medical services were desired.

AFDC Eligibles

Demographic Characteristics

Full interview data were collected for 1,519 AFDC recipients in Little Rock. Table 4.8 breaks down the AFDC individuals according to selected demographic characteristics. About 90.2 of the recipients were black, and over three-fourths were children (under age 21). Of the children, nearly 7% were one year old or younger and an additional 22% were of preschool age (under 6). Among the children, 57% of the whites and 49% of the blacks were male. Among the adults, only 3% of the blacks and none of the whites were male--again reflecting the familiar matriarchal family pattern among AFDC cases. Just under 20% of all AFDC adults were marrked, but almost twice as many whites as blacks were (33.3% v. 17.4%). Blacks were more often found in cases of 4 or more individuals than whites (74.5% v. 65.0%).

There were 140 individuals--99 children (8.3%) and 41 adults (10.7%) who indicated that they had some form of additional health insurance. Commercial insurance was the most common source of coverage, closely followed by Blue Cross and Blue Shield. This supplemental coverage was held more often by whites than blacks.

Hospital and Nursing Home Utilization

As indicated in Table 4-9, 16.3% of the eligibles had been hospitalized in either 1972 or 1973 for a reported total of 20.9 admissions per 100 AFDC eligibles during the 18-month period. Adults had a far higher proportion hospitalized than did children (30.6% v. 12.5%) as well as a greater number of admissions per 100 (39.2 v. 15.9). A larger proportion of whites (22.2%) than

TABLE 4-8. SELECTED DEMOGRAPHIC CHARACTERISTICS: LITTLE ROCK AFDC ELIGIBLES*

	AFDC Total			Children			Adults		
Characteristic	T	W	B	T	W	B	T	W	B
Sex									
% male	38.8	40.3	38.5	50.4	56.8	49.4	2.6	0.0	3.1
% female	60.9	59.7	61.2	49.3	43.2	50.2	97.4	100.0	96.9
Age									
% 1 year or less	5.1	4.4	5.2	6.7	6.2	6.8	0.0	0.0	0.0
% 2-5 years	16.4	10.7	17.2	21.6	15.1	22.5	0.0	0.0	0.0
% 6-20 years	54.3	55.8	54.1	71.7	78.8	70.7	0.0	0.0	0.0
% 21-44 years	18.7	21.9	18.1	0.0	0.0	0.0	76.9	75.0	77.3
% 45 and over	5.7	7.3	5.4	0.0	0.0	0.0	23.1	25.0	22.6
Education									
% none	23.5	18.9	24.2	30.7	26.7	31.3	1.0	0.0	1.2
% Grades 1-6	32.4	38.3	31.5	38.9	50.0	37.3	12.0	10.0	12.4
% Grades 7-12	40.7	39.4	40.9	28.0	19.9	29.2	80.1	86.7	78.9
% post high school	1.8	2.0	1.9	0.5	1.4	0.4	6.1	3.4	6.5
Marital status									
% married	4.9	10.2	4.2	0.2	0.7	0.1	19.9	33.3	17.4
% not married	94.9	89.9	95.5	99.7	99.3	99.7	79.6	66.6	82.0
Case size									
% 3 or less	33.4	47.9	31.4	30.6	41.8	29.1	44.1	66.7	40.2
% 4 or over	66.5	52.1	68.6	69.4	58.2	70.9	55.9	33.3	59.8
Total number of eligibles	1519 (58)	194 (12)	1324 (46)	1195 (0)	146 (0)	1048 (0)	324 (58)	48 (12)	276 (46)

*See footnotes to Table 3-8.

than of blacks (15.5%) reported a hospital stay, a difference that was especially evident among adults (39.6% v. 29.0%, p = .0706). Note also that a significantly larger proportion of children in cases of size three or less (22.0%) than of children in cases of size four or more (13.4%) reported a hospital stay in 1972-73. Once more, this is probably explained in large part by the generally younger age composition of the smaller families, the larger proportion of these children in infancy and, hence, the probability that many would have been hospitalized at least for birth within the previous eighteen months.

The mean length of stay for the last visit was 6.3 days--5.9 among children and 6.8 among adults. If this mean length of stay for the last visit is indeed representative, as we have assumed, we find the total number of inpatient days per 100 AFDC eligibles for this 18-month period was 131.7, as contrasted with the previously cited figures of 766.7 among the AD and 711.4 among the OAA.

Rather substantial differences in the total number of hospital days per 100 eligibles exist between races, and this is particularly pronounced among the adults (white = 455.0; black = 231.3;   ).

TABLE 4-9. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE:* LITTLE ROCK AFDC ELIGIBLES

Characteristic	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% eligibles hospitalized in 1972-73	16.3	22.2	15.5	12.5	16.4	11.9	30.6	39.6	29.0
Number of admissions per 100 eligibles in 1972-73	20.9	26.3	20.1	15.9	18.5	15.8	39.2	50.0	37.3
Mean length of stay on last admission	6.3	6.5	6.2	5.9	4.1	6.2	6.8	9.1	6.2
Total number of inpatient days per 100 eligibles in 1972-73	131.7	170.9	124.6	93.8	75.8	98.0	266.6	455.0	231.3
Out-of-pocket expense									
Percent	16.5	18.6	16.1	17.4	25.0	16.0	15.2	10.5	16.2
Mean ($)	180.80	292.50	155.00	183.00	326.00	135.30	177.10	125.00	181.80
Median ($)	121.50	279.20	107.50	150.00	300.00	116.20	107.50	125.00	90.00

*See footnotes to Table 3-9.

Although three-fourths of the hospitalized eligibles indicated that Medicaid was the payor for their last hospital stay, 16.5% also indicated that they had incurred substantial out-of-pocket expenses in connection with their most recent stay--mean = $180.80. Furthermore, there were very substantial racial differences present, with 20% fewer whites than blacks having their bills paid by Medicaid and a difference in mean out-of-pocket expenditures which approached $140--the bill for whites being higher.

Though the survey produced no firm evidence to explain the persistent racial differences, it begins to appear that welfare rights and civil rights have become so entangled in recent years that, perhaps subconsciously, greater efforts have been made by government officials to inform racial minorities of their entitlement to benefits. It may also be true that organized civil rights groups have played a role in educating their membership to the full advantage of available benefits. Other possible explanations are explored in Chapter 7.

There were no reported cases of nursing home confinement among the AFDC eligibles in Little Rock.

Dental Care

Table 4-10 shows that approximately one-fifth of the AFDC eligibles reported regularly seeing a dentist. Racial patterns followed expectations. Among the children, 34.9% of the whites v. 20.5% of the blacks, p = .0000,

TABLE 4-10. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:* LITTLE ROCK AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	20.7	31.4	19.1	22.3	34.9	20.5	14.8	20.8	13.8
% that saw a dentist in 1972-73	36.8	50.0	34.9	35.9	54.8	33.2	40.4	35.5	41.3
Out-of-pocket expense for last dental visit									
Percent	17.3	25.8	15.6	10.0	16.2	8.6	41.2	70.6	36.8
Mean ($)	38.50	30.10	41.50	29.80	28.10	30.50	45.60	32.20	49.50
Median ($)	18.20	17.60	18.90	18.00	15.70	23.50	18.70	23.50	17.00
% that had an unmet dental need in 1973	16.4	24.2	15.3	11.7	19.9	10.6	33.6	37.5	33.0
% that had a current dental problem	21.8	31.4	20.4	15.9	26.0	14.5	43.5	47.9	42.8

*See footnotes to Table 3-10.

reported regular visits. In the adult category as well, the same pattern prevailed, with 20.8% of the whites and only 13.8% of the blacks claiming regular visits. With respect to the proportion of children who had seen a dentist in 1972-73, the same racial pattern persisted; among the adults, however, there was a reversal, with 41.3% of the blacks v. only 35.5% of the whites (p = .2249) reporting dental visits during that 18-month period. Given the relatively high p value, it is quite possible that the latter result is attributable to sampling variability rather than to true population differences.

Case size, though having little impact on the proportion of adults who regularly saw a dentist, did have a substantial effect among children; 26.7% of the children in the four or more category v. only 12.6% of those in the three or less grouping regularly saw a dentist, p = .0000. Given that only 22.4% of the children in families of four or more are under six years old, while 41.4% of the children in families of three or less fall in the preschool bracket, this result is not surprising. Not only do very young children have fewer teeth, thus reducing the need for dental care, but they also are unlikely to have been exposed to any school dental programs.

Of the children who did not regularly see a dentist, over half (53.4%) attributed their behavior to the lack of perceived need, while 19.2% were reported to be too young and another 15.4% blamed lack of money. Among adults, lack of perceived need again predominated (53.3%), but lack of money became a more important factor (22.8%).

Among the eligibles who did not have regular dental patterns, proportionally more blacks (56.0%) than whites (32.3%) attributed this to a lack of any perceived need for such care (p = .0000). This familiar trend held for the children as well as the adults, so that exposure to school dental programs, if any, did not appear to substantially alleviate this difference. By the same token, far more whites than blacks (37.6% v. 14.6%, p - .0000) blamed lack of money for their failure to see a dentist. This may be valid based on their different experiences; note in Table 4-10 that a much higher proportion of whites than blacks (25.8% v. 15.6%, p = .0080) actually had incurred out-of-pocket expenses for their last dental visit. Since, for the most part, dental services are covered in Arkansas, this may reflect relatively greater ignorance of the benefit structure among the whites, or possibly, some reluctance on the part of dentists in Little Rock to participate in the Medicaid program. Note that almost half again as many whites as blacks received their dental care from either a private dentist or private clinic.

Among those who had seen a dentist in 1973, the mean number of visits was 1.9. Among the children, over half (58%) reported a general checkup/cleaning as the reason for their last visit, while 38.9% reported cavity repair and 17.2% had an extraction (20% of the whites v. 16.7% of the blacks). For the adults, extractions (62.6%), cavity repair (19.1%), general checkup (13%) and dentures (13%) were most often cited. Black adults outdistanced their white counterparts on extractions by a whopping margin of 65.8% to 41.2%; for dentures, the relationship was reversed by a 17.6% to 12.3% margin. Among these adults who had seen a dentist in 1972-73, a substantially greater proportion of whites than blacks had a general checkup or cavity repair service. This may reflect a propensity among low-income blacks to ignore their dental health until extraction becomes necessary.

Just over 50% of all AFDC respondents reported that their last dental visit was paid for by Medicaid, but there was a substantial racial gap, especially among adults--35.3% of the whites v. 64.9% of the blacks, p = .0098. Conversely, while only 17% of the total reported payment by self or family, among the adults the relationship was 70.6% of the whites v. 35.1% of the blacks, p = .0026. Given that fairly complete dental benefits are supposed to be available under Arkansas Medicaid, it is clear that many Medicaid eligibles in the state--especially among the whites--are not taking full advantage of their entitlement. Reasons for this are not immediately clear, though ignorance and/or pride must surely play a part.

Private dentists played a major role in providing dental care to AFDC eligibles in Little Rock, serving over 34% of the children and over 80% of the adults who had regular dental patterns. In both categories, whites were more likely than blacks to use a private dentist (overall p = .0143). Public and parochial school dental programs ran a close second as a source of care among the children, serving roughly one-third of the group without any significant racial variation.

As reflected in Table 4-10, 16.4% of the eligibles had experienced an unmet need for dental care during 1973, and 21.8% felt they had a problem at the time they were interviewed. Almost three times as many adults as children noted a previously unmet need (33.6% v. 11.7%) or a current dental problem (43.5% v. 15.9%). As expected, whites consistently were more prone to perceive unmet needs than were their black counterparts (p=.0009). The bulk of the unmet needs were focused on cavity repair and general checkups for children and on cavity repair and extractions for adults.

The principal barrier to dental treatment was, by a wide margin, lack of money--accounting for roughly three-fifths of both adults and children. Given the fact that most dental services are covered for both adults and children in Arkansas, this is a mildly surprising result. On the other hand, the requirement that prior approval be obtained for restorative and orthodontial care may account for the problem. It is possible that some (many?) dentists are unwilling to get involved in the necessary clearance process.

The next most common problem was lack of transportation. This, of course, is also partially a money problem, especially in Little Rock, with its allegedly poor public transportation system, a situation which might suggest a need for taxicab fare. Next, in order of importance, were "not sick enough" and fear. Note that a larger proportion of whites than blacks cited lack of money and lack of transportation; the reverse was true for "not sick enough" and fear.

Vision and Hearing Care

About 7.7% of the AFDC sample had obtained eyeglasses in either 1972 or the first half of 1973. At the time, the Arkansas Medicaid program provided comprehensive coverage of vision care services for children but only very limited benefits for adults. As seen in Table 4-11, a much larger proportion of adults (15.1%) than of children (5.7%) procured glasses during this period (p = .0000). This is predictable in light of the increasing need for glasses with age. Proportionally more whites than blacks had obtained glasses. It also appeared that family size played some role in the incidence of glasses among children. In cases of four or more, 4.7% of the children had obtained glasses during the reference period, while in cases of three or less the figure was 7.9%, p = .0138. At first blush, this is a surprising result. As previously noted, the larger cases tend to have older children and vision problems do tend to increase with age. The data also show that the proportion of unmet needs for eyeglasses among children is also greater in the smaller cases (7.4% v. 5.7%). It may well be that many congenital sight problems are discovered in infancy or at least in the first 3-6 years of life, so that the incidence of glasses in the last 18 months might be higher in a younger group. Had the latter relationship been reversed, it might have been possible to attribute the unmet needs to more serious financial pressures in the larger families. It should also be noted that the survey focused on incidence rather than prevalence of glasses--had the reverse been true it is quite likely that proportionally more glasses would have been found in cases of four or more.

The great majority of glasses--both for adults and children--were obtained from a private doctor. Opticians/eyeglass companies ran a distant second for both groups.

Over half of the children--both races--had their glasses paid for by Medicaid, while about 34% were paid for out-of-pocket. This was one of the very few instances in which more blacks (35.1%) than whites (27.3%) incurred such expenses, but the margin was not great and the numbers involved were small. Among the adults, nearly 86% paid for their glasses themselves, a not unexpected finding given the lack of eye care coverage for adults.

TABLE 4-11. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE:*
LITTLE ROCK AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that obtained glasses in 1972-73	7.7	10.8	7.3	5.7	7.5	5.4	15.1	20.8	14.1
Out-of-pocket expenses for last pair of glasses									
Percent	55.5	57.1	55.2	33.8	27.3	35.1	85.7	90.0	84.6
Mean ($)	50.30	49.00	50.60	50.30	66.30	47.80	50.30	42.50	52.20
Median ($)	51.00	46.00	51.90	50.00	55.00	49.10	51.70	40.00	54.00
% that had an unmet need for glasses in 1972-73	10.8	7.7	11.3	6.2	2.7	6.7	27.8	22.9	28.6
% that eye/vision care in 1972-73	26.6	28.4	26.3	26.3	26.0	26.4	27.5	35.4	26.1
Out-of-pocket expenses for eye/vision care									
Percent	21.9	32.0	20.0	13.0	15.8	12.6	54.8	83.3	48.0
Mean ($)	42.40	36.70	45.10	44.20	39.00	47.40	41.60	35.40	44.20
Median ($)	45.60	40.00	50.00	48.00	45.00	50.00	42.50	33.20	50.00
% that had an unmet need for eye/vision care in 1973	10.3	9.8	10.3	5.7	4.8	5.8	27.2	25.0	27.5

*See footnotes to Table 3-11.

Again referring to Table 4-11, 10.8% of the full AFDC group experienced an unmet need for glasses during 1972-73. Adults fared much worse than children (27.8% v. 6.2%, p = .0000), a result which probably reflects the different coverage patterns and the generally increasing need for glasses with age. In an unusual turn of events, more blacks than whites perceived an unmet need for glasses in both adult and children subpopulations. It seems most unfortunate that, despite very comprehensive coverage for children under Arkansas Medicaid, two-thirds of the children who needed but failed to obtain glasses blamed it on a lack of money. The same reason was cited by over 83% of the adults with such an unmet need, but this is more understandable, because vision care benefits for adults were very restricted.

With respect to general eye/vision care, an almost identical proportion of black and white children had obtained such services during the reference period. Among adults, whites had made greater use of these services. The level of use of these services was almost the same for both adults and children. In another mild reversal of form, slightly more blacks than whites perceived an unmet need for vision care services during 1973. Routine vision checks dominated the use by children (58.3%), followed by mechanical eye problems (31.3%). The latter were the major reason for seeking care among the adults (58.1%).

TABLE 4-12. OUT OF POCKET EXPENSES AND UNMET NEEDS FOR PHYSICIAN SERVICES:*
LITTLE ROCK AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	44.2	48.5	43.6	39.8	41.8	39.5	60.5	68.8	59.1
Out-of-pocket expense									
Percent	15.8	23.5	14.6	13.8	21.5	12.6	20.6	27.3	19.3
Mean ($)	14.10	16.70	13.50	12.20	9.20	12.90	17.00	25.80	14.60
Median ($)	11.20	9.90	11.40	10.10	7.20	10.70	12.60	13.00	12.50
% that had an unmet need to see a physician in 1973	4.6	7.7	4.2	1.7	2.7	1.5	15.4	22.9	14.1

*See footnotes to Table 3-12.

Most vision care was obtained either through a private doctor's office/ private clinic (77.4% adult; 28.7% children) or a hospital emergency room/clinic (16.1% adult; 24.3% children). Out-of-pocket expenditures were incurred by 54.8% of the adults and 13.0% of the children, and, once again, the familiar pattern of more whites than blacks bearing these costs is present.

Once again, the use of and need for hearing aids was found to be negligible, and no analysis was performed. Similarly, other hearing problems were seldom identified by the sample eligibles, and no attempt will be made to analyze the very limited data produced.

Physician Services and Prescriptions

The percentage of eligibles that utilized physician services is presented in Table 4-12. Over 44% of the AFDC sample had seen or phoned a physician during the first half of 1973. There was a dramatic difference between adults (60.5%) and children (39.8%), p = .0000. The difference by race is worth noting only with respect to the adult category (68.8% white; 59.1% black). Case size was, once again, an important variable, at least among children. In cases of three or less, 51.5% of the children had contacted a physician, while the figure in cases of four or more was only 34.6%. This is undoubtedly explained by the children in smaller families being younger and requiring more periodic checkups and immunizations. It may also reflect a bit of the typical anxiety of new, first-time mothers.

Among those who contacted a physician in the first half of 1973, the mean number of visits was about 3.4 for adults and 2.5 for children.

Going back to January 1972, over 70% of the AFDC sample had either seen or phoned a physician in the roughly 18-month period--67% of the children and 81.5% of the adults. While only a modest proportion (39.2%) of the AFDC sample indicated that they had a regular doctor (62.9% white v. 35.8% black, p = .0000), 91.5% of the remainder claimed that they usually saw a physician when necessary

(75.0% white v. 92.9% black). This suggests a rather high level of accessibility to primary care services on the part of the AFDC population. Among the whites, the private doctor emerged as the most prevalent (58.5%) source of primary care. This presents quite a contrast with the blacks, among whom the hospital emergency room or clinic constituted the principal (62.2%) source for such care. Note from Table 4-12 that only a meager 4.6% of the AFDC population in Little Rock reported an unmet need for physician services in 1973. There is some room for concern, though, since 15.4% of the adults reported such a problem. Once again, unmet needs were consistently perceived by a larger proportion of whites than blacks, p = .0153. While this may reflect less knowledge of available benefits among whites, one wonders at the persistency of this relationship for almost all services and subpopulations. Perhaps if the true cause could be identified it would be subject to corrective action. It has been suggested, naturally, that the pattern is more a reflection of too much pride to accept charity. This position, however, is difficult to accept on a nearly blanket basis.

Of the eligibles who had seen or phoned a physician in 1973, 23.5% reported a chronic condition requiring regular medical attention. This percentage rose to 43.9% among adults and fell to 15.1% among children, p = .0000. Most frequently cited conditions plaguing adults were hypertension (37.2%), coronary artery disease (12.8%) and gastrointestinal disorders (10.5%). Among chronically ill children, asthma (20.8%), bronchitis (18.1%), and upper respiratory infections (13.9%) were the principal conditions. Among these chronic eligibles, almost 33% reported that they usually received an injection during their periodic visits; 71.5% usually received a prescription, and 15% generally were given some sample medication.

Among the eligibles whose last visit to a doctor in 1973 was not related to a chronic condition, fewer (29.9%) received an injection, and there was a dramatic reduction in the proportion that received a prescription (from 71.5% to 45.7%).

Medicaid was clearly the predominant method of payment for physician visits in Little Rock, accounting for about three-fourths of the total. As shown in Table 4-12, 15.8% of the eligibles who used physicians' services incurred an out-of-pocket expense for their last (or typical) visit, with the mean payment amounting to $14.10.

About 84% of the respondents claimed to have had a routine medical checkup either during 1972 or 1973. The proportions were the same for adults and children and there were virtually no differences by race. Once again, this figure is probably not too reliable because of the lack of a clear definition of what is meant by a "routine medical checkup."

For the most part, prescriptions were not covered by Arkansas Medicaid. As can be seen from Table 4-13, this presented some rather serious problems for the AFDC eligibles. Nearly one-fourth of the eligibles who received prescriptions during 1973 failed to get them filled/refilled as needed, and 84% incurred out-of-pocket expenses for their prescriptions. Lack of money (i.e., lack of program coverage) was cited as the reason for failure to fill prescriptions by over one-fourth of the eligibles. Very significant differences existed between adults and children and blacks and whites, with adults and blacks more frequently being

TABLE 4-13. ISSUANCE, OUT-OF-POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:* LITTLE ROCK AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	27.2	40.7	25.2	23.4	33.6	22.0	41.0	62.5	37.3
% of eligibles that failed to fill or refill as needed	23.7	25.3	23.4	22.1	20.4	22.5	27.1	33.3	25.2
Out-of-pocket expense for prescriptions									
Percent	84.2	86.8	83.7	81.3	85.2	80.6	91.9	90.9	92.0
Mean ($)	18.40	19.20	18.30	10.70	8.90	11.10	31.60	37.20	30.60
Median ($)	5.90	6.40	5.80	4.20	4.10	4.40	14.50	17.60	13.90

*See footnotes in Table 3-13.

deterred by lack of funds. Despite this, however, "not sick enough" was by far the most common reason for not filling prescriptions, having been listed by nearly 46% of those eligibles who had not filled and refilled all the 1973 prescriptions. This reason was most common among white children and black adults. About 40% of those who paid for their own medicines knew that Medicaid would not cover them. Most of the rest were not sure of the benefits. In this case, the proportions of blacks and whites who incurred out-of-pocket costs were almost identical.

Virtually all prescriptions were filled either through a drugstore (71.6%) or a hospital pharmacy (31.6%). Children and blacks both tended to make more use of the hospital as compared to adults and whites, respectively, but a substantial majority in all classifications relied on the drugstore.

About three-fourths of the AFDC sample were currently using some non-prescription medication, and there were virtually no differences between the racial and age subgroupings. Mean expenditures for these items ranged roughly from $5.00 to $15.00 in the first half of 1973.

Home Health Care, Family Growth and Planning, and General Health Status

In no subclassification of the total AFDC sample did more than 6.3% (white adults) nor less than 5.4% (black children) utilize any home health services, and all of those reporting had used only visiting nurse services. Proportions of those having an unsatisfied need for home health services were almost as low, though some differences were manifested--primarily that more whites than blacks felt a need for such services. No analysis has been attempted because of the small numbers involved.

No analysis was attempted with regard to walkers/crutches, either. Their use was minimal in this sample and no unmet needs were reported.

TABLE 4-14. SUBJECTIVE HEALTH RATINGS: LITTLE ROCK AFDC ELIGIBLES

Rating	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
Percent									
Excellent	11.1	16.0	10.3	12.3	17.8	11.5	6.5	10.4	5.8
Good	56.8	45.4	58.5	63.3	52.7	64.8	32.7	22.9	34.4
Average	26.3	24.2	26.6	21.8	21.2	21.9	42.6	33.3	44.2
Poor	5.7	14.4	4.5	2.3	8.2	1.5	18.2	33.3	15.6

Among female AFDC eligibles between the ages of 13 and 50, 43.7% either were currently or had been pregnant within the last five years--44.6% of the blacks and 37.5% of the whites, p = .1575. Among female children under age 21, 31.2% either were or had been pregnant.

Over 96% of the babies born to AFDC mothers during either 1972 or 1973 were delivered by a physician. Among this group of mothers, 69.0% saw a doctor regularly during the first trimester of pregnancy (87.5% white; 67.1% black), while 92.9% both saw a doctor during their last trimester and received regular neonatal care for themselves and their babies.

One-fourth of the women who had been pregnant within the last five years reported that their most recent pregnancy had not resulted in a live birth. Of this group, 68.8% had miscarriages; the remainder either had a stillbirth or an abortion. Less than 10% of the women who had been pregnant within the past five years planned to have more children. Approximately half of these women had at some time received professional birth control advice, and of these, a plurality of whites (45.8%) got their information from a private doctor, while a plurality of blacks (41.3%) got theirs at a hospital outpatient clinic. Over the total group, planned parenthood organizations ranked second (24.1%) behind hospitals, and public health clinics also served over 10% of the group. Less than 4% of those who received professional birth control advice incurred a charge for this service, and barely 2% of all women in the 13-50 age group had experienced an unsatisfied need for this information. Clearly, then, birth control and family planning information is readily accessible to those who desire it.

Subjective self-ratings of health status appear in Table 4-14. Almost one-fifth of the adults rated their health as poor, but the comparable statistic for children was barely over 2%.

The health care services available to AFDC eligibles were rated poor by only 6.3% of the group, while 76.1% scored them either good or excellent. Most commonly cited as reasons for rating health services as poor were high costs, missing coverage, and long waits. The most widely cited service which eligibles would like to have added to their Medicaid package was coverage for prescription and non-prescription drugs, listed by 23% of the group. In summary, except for coverage of medications, there did not exist among AFDC eligibles in Little Rock any serious level of discontent with existing medical services. This finding is mildly surprising, however, in light of the fact that in earlier questions over one-third of the adults cited unmet needs for dental care, while one-fourth of them claimed unmet needs for eye/vision care and/or glasses.

CHAPTER 5

A PROFILE OF THE HEALTH CARE BEHAVIOR PATTERNS OF OKLAHOMA CITY PUBLIC ASSISTANCE RECIPIENTS

The Setting

At the time of the survey, the Oklahoma Medicaid program provided very little coverage of the principal optional services. Prescriptions were omitted from the benefits package, the only exception being chemotherapeutic drugs sometimes used in the treatment of cancer. While the screening program provided fairly complete dental coverage (including orthodontic work) for those under 21, care for adults was covered only in cases which were life threatening or which presented acute pain. There was essentially no coverage of either restorative work, extractions, orthodontia or dentures for eligibles over age 21. Eye and vision care presented a similar pattern, with the screening program offering optometric services and eye glasses to children under age 21 but with no coverage for adults except in sight-endangering cases. While eye surgery and organic eye problems were provided under the federally mandated coverage of physician services, basic refractive work and eye glasses were not covered for adults. Hearing aids, too, were provided only to eligibles under age 21 through the screening program.

The eligibles were entitled to four outpatient physician visits per month in their home, the physician's office or elsewhere, and physicians were reimbursed on the basis of usual and customary fees with no cost-sharing provisions.

While parts of Oklahoma City extend into Cleveland and Canadian counties, the bulk of the population is in Oklahoma County. The largest low-income area lies a few blocks east of the downtown business district. Based upon information ascertained during a site visit, it can be stated that geographical accessibility to medical services was not a major problem in this low-income area. The University of Oklahoma Medical Center lies within this area and constitutes a major source of ambulatory care for the indigent. Furthermore, most of the physicians in this area were willing to treat Medicaid clients, a trend which unfortunately did not hold in the small pockets of poverty in Mid West City and Del City (incorporated areas within the boundaries of Oklahoma City). In these isolated pockets (across the Canadian River from the heart of Oklahoma City), most physicians were reluctant to handle Medicaid clients and, in order to obtain medical care, eligibles frequently had to travel into center city. Public transportation was poor at best; in some areas of the city, it was nonexistent. To our knowledge, there were no comprehensive health centers (e.g., Children and Youth Projects, Model Cities, O.E.O., etc.) in operation throughout the reference period of 1972 and the first half of 1973.

When an eligible needed one of the uncovered optional services, he often approached the Oklahoma County Social Service for assistance. There were several eleemosynary organizations, e.g., Eyes for the Needy, which helped the County Social Service in filling such requests. However, these resources provided assistance on a highly nonsystematic, sporadic, case-by-case basis and were hardly sufficient in either magnitude or scope to meet the burgeoning demand for these uncovered services.

Regarding prescriptions, it should be noted that a $17.00 per person allowance for medications was built into the monthly assistance budget. If an eligible was able to document that he had exhausted this $17.00 in any given month, then for the remainder of that month he could fill his prescriptions free of charge at a county dispensary. (We were informed that Oklahoma and Tulsa counties were the only two in Oklahoma to provide such a program.)

To summarize, with the exception of those residing in a few isolated pockets of poverty, accessibility to primary care was not a major problem for the Oklahoma City eligibles. With respect to the uncovered optional services, however, they were available, but, for the most part, had to be purchased by the eligibles themselves. The few eleemosynary organizations which did exist provided these services only on a nonsystematic basis and, in general, they did not substantially alleviate the eligibles' financial burden inherent in obtaining them.

AD and OAA Eligibles

Demographic Characteristics

Data were collected and tabulated on a total of 164 AD and 298 OAA recipients in Oklahoma City. Table 5-1 cross-classifies these categories by various selected demographic variables. Thus, among the AD sample of 164 eligibles, 129 (78.7%) were white, 31 (18.9%) were black, and 4 (2.4%) were American Indians. The male-female ratio was roughly 1:2 but the majority of the females were beyond the effective childbearing range. Only 21% of the AD sample were married and almost half lived by themselves. There were only six (3.7%) AD eligibles who claimed that they had some form of private insurance coverage.

Almost three-fourths of the OAA sample were white. There were over three times as many females as males and approximately 72% were not married. Similar to the AD, almost half of the OAA eligibles lived alone. Approximately 56% of the OAA sample were in the older (75 and over) age category, the mean age having been 76.0 years. Almost 90% stated that they were Medicare beneficiaries and 7.0% claimed to have some private health insurance coverage.

Hospitalization and Nursing Home Care

Table 5-2 shows that the AD eligibles had a significantly higher utilization of hospital inpatient care than the OAA, as measured by the proportion hospitalized in 1972-73 (43.3% and 33.9% respectively, p = .0228), the total number of admissions per 100 eligibles (93.9 and 62.2 respectively), and the total number of inpatient days per 100 eligibles (920.2 and 590.9 respectively).* This trend, which held for blacks and whites alike,

---

*The underreporting of 1972 admissions did not appear to be as severe as in Atlanta. The AD reported 60 admissions in 1972 and 99 in 1973; the OAA, 75 in 1972 and 112 in 1973. See footnote, p. 23.

TABLE 5-1. SELECTED DEMOGRAPHIC CHARACTERISTICS: OKLAHOMA CITY OAA AND AD ELIGIBLES*

	OAA Total				OAA, 65-74				OAA, over 75				AD			
	T	W	B	AI**	T	W	B	AI	T	W	B	AI	T	W	B	AI
Sex																
% male	23.1	23.4	22.4	25.0	22.0	23.9	17.1	25.0	23.8	23.1	26.8	0	33.5	38.0	19.4	0.0
% female	76.9	76.6	77.6	75.0	78.0	76.1	82.9	75.0	76.2	76.9	73.2	0	66.5	62.0	80.6	100.0
Age																
% 44 or less	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	28.6	27.9	32.3	25.0
% 45-64	3.4	2.8	3.9	25.0	6.3	4.5	8.6	25.0	1.2	1.6	0.0	0	64.0	65.1	58.1	75.0
% 65-74	39.8	38.1	43.5	75.0	89.7	89.8	91.4	75.0	2.9	3.1	2.4	0	6.7	6.2	9.7	0.0
% 75 and over	55.9	57.8	52.7	0.0	3.9	5.7	0.0	0.0	94.2	93.0	97.5	0	0.0	0.0	0.0	0.0
Education																
% none	6.4	6.9	2.6	50.0	3.9	3.4	0.0	50.0	8.1	9.2	4.9	0	4.3	4.7	0.0	25.0
% Grades 1-6	38.5	34.4	50.0	25.0	28.3	27.3	31.4	25.0	45.9	39.2	65.9	0	28.7	28.7	22.6	75.0
% Grades 7-12	49.5	51.8	46.0	0.0	63.8	65.9	65.7	0.0	39.0	42.3	29.3	0	61.0	60.5	71.0	0.0
% post high school	3.0	3.7	0.0	25.0	2.4	2.2	0.0	25.0	3.5	4.6	0.0	0	5.5	5.5	6.5	0.0
Marital status																
% married	28.4	30.3	21.1	75.0	37.0	40.9	22.9	75.0	22.1	23.1	19.5	0	20.7	26.4	0.0	0.0
% not married	71.6	69.7	78.9	25.0	63.0	59.1	77.1	25.0	77.9	76.9	80.5	0	79.3	73.6	100.0	100.0
Living arrangement																
% living alone	48.2	45.4	56.6	50.0	44.9	40.9	54.3	50.0	50.6	48.5	58.5	0	47.0	44.2	58.1	50.0
% not living alone	51.8	54.6	43.4	50.0	55.1	59.1	45.7	50.0	49.4	51.5	41.5	0	53.0	55.8	41.9	50.0
Total number of eligibles	298 (0)	218 (0)	76 (0)	4 (0)	127 (0)	88 (0)	35 (0)	4 (0)	171 (0)	130 (0)	41 (0)	0 (0)	164 (0)	129 (0)	31 (0)	4 (0)

*See footnotes to Table 3-1.

**The American Indian classification was used only in Oklahoma City. Because of its small size, especially in the OAA and AD categories, meaningful analysis was not possible, and tabulations are not reflected in Tables 5-2 to 5-7. In one or two instances this results in percentages that do not add to 100.0 in those six tables.

may very well be a function of the pattern of disabling conditions among the AD group (although it did not appear to be attributable to the relative prevalence of chronic ailments in general, since as shown later, the proportions reporting a chronic condition in the two categories were very close. Table 5-2 also reveals that, for the most part, whites appeared to be receiving inpatient care more frequently than blacks. While the total number of admissions per 100 eligibles was higher among whites in both assistance categories, the mean length of stay was longer among blacks, perhaps reflecting complications resulting from a backlog of unmet needs.

An examination of the sources of payment reveals that most of the eligibles are taking advantage of their hospitalization benefits under Medicare and Medicaid. Among the OAA, respectively 66% and 68% of those hospitalized cited Medicaid and Medicare as the method of payment for their last admission; among the AD, 89% cited Medicaid. Because this was a multiple response question, the Medicare/Medicaid responses by the elderly clearly do not represent discrete groups, by the same token, because many eligibles fail to distinguish between the two programs, it is probable that the total percentage of OAA eligibles who had the bulk of their hospital bill paid by one of the programs is at least as high as for

TABLE 5-2. UTILIZATION AND OUT OF POCKET EXPENSES FOR INPATIENT HOSPITAL CARE:* OKLAHOMA CITY OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% eligibles hospitalized in 1972-73	33.9	35.3	31.6	29.9	34.1	22.9	36.6	36.2	39.0	43.3	45.7	32.3
Number of admissions per 100 eligibles in 1972-73	62.2	70.6	42.1	52.0	63.6	28.6	69.6	75.4	53.7	93.9	98.4	80.6
Mean length of stay on last admission	9.5	8.7	11.7	9.1	9.3	8.5	9.7	8.4	13.3	9.8	9.0	11.7
Total number of inpatient days per 100 eligibles	590.9	614.2	492.6	473.2	591.5	243.1	675.1	633.4	714.2	920.2	885.6	943.0
Out-of-pocket expense												
Percent	12.0	9.2	20.8	13.2	16.7	0.0	11.3	4.3	31.2	11.3	11.9	10.0
Mean ($)	130.00	202.90	28.00	126.00	126.00	0.0	132.90	395.00	28.00	76.30	85.00	15.00
Median ($)	53.30	116.20	30.00	116.20	116.20	0.0	45.00	600.00	30.00	13.30	12.50	15.00

*See footnotes to Table 3-2.

the AD group. Roughly 11-12% of the eligibles who had been hospitalized in 1972-73 paid at least part of the charges for the last admission themselves. It was not determined whether these eligibles were on the public assistance rolls at the time of their last admissions.

Ten (3.4%) OAA eligibles and four (2.4%) AD eligibles had been in a nursing home on a temporary basis sometime during 1972-73. Again, Medicaid and Medicare were the most frequently cited methods of payment, but four of these eligibles reported a fairly sizable out-of-pocket expense for their last stay (mean = $180, median = $185).

Dental Care

As shown in Table 5-3 below, the OAA eligibles had a much lower need for, and utilization of, dental services than did their AD counterparts, a finding which is probably largely attributable to the former's greater use of dentures. Thus, a significantly higher proportion of the AD eligibles had established a regular dental care pattern (p = .0062), had seen a dentist in 1972-73 (p = .0047), had experienced an unmet dental need in 1972-73 (p = .0001), and had a dental problem at the time of the interview (p = .0006).

Among the eligibles who did not regularly see a dentist, 56.8% of the OAA ascribed this to the use of dentures, in contrast to 29.1% of the AD, p = .0000. Even within the OAA, a significantly larger proportion of the older subpopulation cited dentures (p = .0003), thereby yielding a positive association between the use of dentures and age, a not particularly surprising result.

TABLE 5-3. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:*
OKLAHOMA CITY OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	4.0	4.1	3.9	3.9	5.7	0.0	4.1	3.1	7.3	9.8	10.1	9.7
% saw a dentist in 1972-73	13.7	13.4	15.7	15.0	13.6	20.0	12.8	13.1	12.2	23.2	20.9	32.2
Out-of-pocket expenses												
Percent	68.3	75.9	50.0	63.2	75.0	42.9	72.7	76.5	60.0	55.3	51.9	70.0
Mean ($)	58.20	52.90	76.00	52.90	48.40	66.30	62.80	56.50	85.70	84.20	110.20	23.40
Median ($)	26.10	26.10	75.00	27.80	30.00	17.00	23.50	18.30	116.20	30.00	60.00	12.00
% that had an unmet dental need in 1972-73	24.4	22.0	31.6	32.3	29.5	40.0	18.6	16.9	24.4	40.9	40.3	41.9
% that had current dental problem	32.8	32.1	35.5	44.1	42.0	51.4	24.4	25.4	22.0	48.2	48.8	48.4

*See footnoes to Table 3-3.

Whites and blacks revealed a similar pattern within both the OAA and the AD samples. Of those who had not established a regular dental care pattern, 61.2% of the whites, in contrast to 45.2% of the blacks, cited dentures as the explanation, p = .0087. On the other hand, a significantly larger proportion of blacks felt that they did not have any need for such a regular dental pattern, p = .0313. These results are consistent with the popular belief that blacks tend to be less cognizant of their dental health.* Again, the finding within the AD sample that a higher proportion (p = .0900) of blacks had seen a dentist in 1972-73 does not necessarily conflict with this popular belief; rather, it may very well reflect a catching-up period after years of neglect.

Since dental care generally was not covered for adults by the Oklahoma Medical Assistance Program, it is not surprising that the majority of the eligibles met the cost of their last dental visit themselves. The principal source of dental care for both races appeared to be the private dentist.

As noted earlier, 24.4% of the OAA and 40.9% of the AD had experienced an unmet need to see a dentist in 1972-73. These needs principally involved dentures and extractions and were imputed to a lack of money in a majority (69%) of cases. Transportation was the second most frequently cited barrier, having been enumerated by respectively 19.2% and 16.4% of the OAA and AD eligibles who complained of such an unmet need. Thus, taken over the entire sample, 20.8% claimed that they had been unable to obtain needed dental care due to insufficient financial resources (presumably related to a lack of Medicaid coverage), while 5.4% blamed a lack of transportation.

---

*See discussion, p. 26.

TABLE 5-4. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE:* OKLAHOMA CITY OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that obtained eyeglasses in 1972-73	16.4	16.1	17.1	18.1	17.0	20.0	15.1	15.4	14.6	22.0	22.5	19.4
Out-of-pocket expenses												
Percent	85.4	85.3	84.6	100.0	100.0	100.0	73.1	75.0	66.7	83.3	82.8	83.3
Mean ($)	57.20	56.00	61.20	57.80	60.80	52.10	56.50	51.50	75.00	50.80	47.20	63.80
Median ($)	57.60	56.10	65.00	61.00	62.90	60.00	54.40	51.20	80.00	50.00	46.70	65.00
% that had an unmet need for glasses in 1972-73	37.1	34.9	44.7	45.7	43.2	54.3	30.8	29.2	36.6	41.5	41.1	48.4
% that obtained eye/vision care in 1972-73	29.4	30.2	27.7	29.2	27.3	34.3	29.7	32.3	21.9	24.4	24.1	25.9
Out-of-pocket expense												
Percent	38.0	39.5	27.3	36.8	38.5	20.0	38.7	40.0	33.3	39.1	42.9	0.0
Mean ($)	42.00	42.40	37.30	60.90	65.20	50.00	30.00	29.80	31.00	38.20	38.20	0.0
Median ($)	43.30	40.00	45.00	63.30	70.00	50.00	26.70	26.70	40.00	45.00	45.00	0.0
% that had an unmet need for eye/vision care in 1973	40.5	39.9	43.4	51.2	56.8	40.0	32.6	28.5	46.3	40.9	41.9	38.7

*See footnotes, Table 3-4.

The proportion of eligibles who reported a current dental problem varied little by race but, as noted earlier, was much higher in the AD than in the OAA sample. Again, the primary problems were dentures and extractions. Comparing the proportions who cited dentures as a current problem, there was a striking difference by race within the OAA category, with a much higher incidence among whites, p = .0007. For extractions, the racial balance was reversed, p = .0010.

Vision and Hearing Care

The level of unmet needs for eye glasses and other vision care as perceived by OAA and AD eligibles in Oklahoma City is quite high (Table 5-4). Among the subgroups analyzed, the OAA 75 and over seemed to have the lowest level of unmet needs for both services. This could reflect the fact that the greater visual deterioration of advanced age made these needs so critical that serving them became a necessity rather than a convenience and, one way or another, ways were found to satisfy them. Alternatively, it could be that by the time they passed 75 people did not perceive their needs for good vision to be very critical relative to other infirmities of age.

There appeared to be no important or consistent differences by race in terms of proportions who obtained glasses in 1972-73 or in the proportion who incurred out-of-pocket expenses for them. On the other hand, a consistently larger proportion of blacks than whites perceived an unmet need for glasses--p (OAA) = .0642 and p(AD) = .2302. For both the OAA and AD, those who did incur out-of-pocket expenses found that they were substantial--generally in the $50-$60 range. Virtually all of the glasses obtained had been prescribed by a physician.

The source of purchase of glasses varied both by assistance category and, to a lesser extent, by race. Among the OAA, 62.5% had obtained their glasses either from a physician or a private clinic; the comparable percentage among the AD was 31.6% (p = .0025). The major sources for AD recipients were opticians or eyeglass companies. Important differences by race appeared only among OAA recipients, where more blacks than whites (46.2% v. 29.4%) got their glasses directly from a private physician, while more whites (38.2% v. 7.7%) cited a private eye clinic. The numbers involved in these instances were too small to compute p values. As a commentary on the dearth of supplementary voluntary programs in the Oklahoma City area, not a single person reported receiving glasses from a voluntary organization. Only a very small percentage cited Medicaid as a source of payment for glasses; this is consistent with the fact that, for adults, they were covered only in sight-endangering cases. Three-fourths or more of those in both OAA and AD assistance groups who failed to get needed glasses attributed this failure to lack of money.

With respect to general vision case, the most common reason for the last visit to the eye doctor for those in both assistance categories was "mechanical eye problems"--31.4% for OAA and 43.5% for AD. Among the OAA, cataracts and other eye growths ran a close second--23.5%. For both problems, blacks among the OAA tended to have a higher frequency of occurrence than whites; for mechanical eye problems, 54.5% v. 23.1%; for cataracts, 36.5% v. 20.5%. In both aid categories, only whites reported any infections of the eye, but numbers were small. Almost all (92.3%) whites in the OAA category last saw a doctor about an eye problem in his office or a private clinic. For blacks, the comparable proportion was 72.7%, with the remaining 27.3% utilizing a hospital emergency room or clinic. Interestingly, 61.6% of the whites reported having received either an injection, free medication, and/or a prescription on their last visit to the eye doctor. The comparable percentage for blacks was 36.4%. In part, this discrepancy may be attributable to the higher level of purely mechanical eye problems among blacks, but further analysis may reveal other factors, including quality of care, to be operative.

A large percentage of both OAA (34.0%) and AD (43.5%) recipients reported that Medicaid had paid for their last visit to an eye doctor. In light of the limited coverage of these services under the Oklahoma Medicaid program, it seems likely that some of the reported visits were, in fact, made to a regular physician rather than eye specialist, and that some evidence of the "utilization effect," the substitution of covered (physician) for uncovered (vision) services, was present.

Hearing aids were reported in Oklahoma City only by whites, with almost all concentrated among the OAA 75 and over, and nearly 80% of those in use having been prescribed by a physician. Lack of Medicaid coverage was reflected by the fact that 16% of the OAA and 10% of the AD reported an unmet need for a hearing aid, and over 70% of that group reported lack of money as the main deterrent. Numbers involved with other ear/hearing problems were generally small, although about 14% of the OAA and 9% of the AD reported unsatisfied needs, with virtually all identifying lack of money/lack of Medicaid coverage as a major problem.

TABLE 5-5. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR PHYSICIAN SERVICES:*
OKLAHOMA CITY OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	64.2	64.7	64.5	66.9	70.5	62.9	62.2	60.8	65.9	67.7	69.0	61.3
Out-of-pocket expenses												
Percent	11.3	12.6	7.8	12.1	13.2	9.1	10.6	12.0	6.9	14.3	15.6	10.0
Mean ($)	18.50	18.10	20.40	9.90	10.40	9.70	26.40	25.40	31.00	12.50	11.10	23.50
Median ($)	10.80	10.50	21.50	8.20	8.10	14.50	18.10	14.80	31.00	7.50	6.90	23.50
% that had an unmet need to see a physician in 1973	22.4	20.2	28.9	26.8	25.0	31.4	19.2	16.9	26.8	31.1	31.0	35.5

*See footnotes to Table 3-5.

Physician Services and Prescriptions

Some of the ambulatory care patterns of OAA and AD recipients in Oklahoma City are reflected in Table 5-5. The data suggest that only minor differences existed between the assistance categories and between races with respect to the proportion who had had a physician contact between January 1, 1973 and the date of the interview. Upon further scrutiny, however, the data revealed some puzzling characteristics. For example, in both assistance categories, a substantially larger proportion of blacks than whites reported only a single doctor visit during 1973. For the OAA category, the figures were: white, 17.7%; black, 40.8%. Among the AD, the comparable numbers were: white, 15.7%; black, 31.6%; p (OAA and AD, pooled) = .0000. Yet, despite the fact that whites were more prone to have experienced multiple physician contacts, of those who had contacted a physician in 1973, more blacks than whites reported having chronic health/medical problems (OAA, whites 62.4%, blacks 71.4%; AD, whites 59.6%, blacks 68.4%, p (OAA and AD pooled) = .0812). Consistent with this reported situation of apparently untreated chronic conditions among blacks was the finding that a larger proportion of blacks than whites in all subpopulations claimed unmet needs for physician visits during 1973.

Among those reporting chronic medical conditions, the three most common problems mentioned were the same in both assistance categories, though the ranking differed slightly. For OAA, the proportions were coronary artery disease (34.7%), hypertension (33.1%), and arthritis/rheumatism/bursitis (29.0%). Among the AD the percentages (presented in the same order) were 24.6%, 31.9% and 23.2%. The expected difference between black and white eligibles with respect to hypertension was substantial among the AD, but it did not exist, for practical purposes, among OAA. The vast majority of the chronically ill of both races reported usually seeing their physician in a private doctor's office/clinic. Among the OAA, blacks saw the physician in the parient's home at a rate almost five times as great as did the whites--11.4% v. 2.3%--but the numbers involved were too small to be very reliable.

Of the chronic eligibles in both assistance categories, it was reported that about 38% usually received an injection during their periodic visits; roughly

64% usually received a prescription; approximately 16% were generally given free samples; and only 7% were often advised by their physician to obtain some nonprescription medication for their condition(s). Among the OAA, no blacks reported receiving either free samples or suggestions for nonprescription drugs, but a larger proportion of blacks than whites (91.4% v. 76.1%, p = .0268) usually received prescriptions.

For those who reported not having chronic conditions, the reasons for the most recent trip to the doctor were very diverse, and only the category of checkup/immunization/shots was named by more than 10% of the respondents. There were significantly more whites than blacks who listed this reason. Again, most of the nonchronic physician visits took place in a private doctor's office, though over both assistance categories combined this was more true for whites than blacks (75.5% v. 56.5%, p = .0327). Combining the assistance categories again, nonchronic individuals were considerably less likely to receive injections, prescriptions or recommendations for nonprescription medicines than their chronic counterparts. About the same proportion received free sample medications however.

Pooling the chronic and nonchronic cases, the overwhelming majority of the eligibles who had seen a physician in 1973 were taking advantage of their Medicaid and, for OAA, Medicare eligibility. As indicated in Table 5-5, only 11.3% of the OAA and 14.3% of the AD claimed an out-of-pocket expense for their last or typical visit. Again, the data reveal a greater tendency among whites to pay out-of-pocket, p (OAA and AD pooled) = .1168, though, on balance, those blacks that did pay had a slightly higher level of expenditure. Mean expenditures among both races, however, were quite modest.

A majority of the eligibles in all of the subclassifications reported having a regular doctor, with a slightly larger proportion of whites than blacks making this claim. However, among those without a regular doctor, proportionally more blacks saw a doctor when necessary (p-OAA/AD = .1215). Race and age appeared to have an impact on the proportion of OAA eligibles who primarily used private physicians, the percentages being higher among whites and the under 75. The same racial pattern held among the AD group, but the overall proportions were somewhat lower. Predictably, the racial pattern was reversed for the use of hospital emergency rooms or clinics as the location for seeing the doctor. AD eligibles also relied much more heavily on the hospital as their regular source of ambulatory care than did their OAA counterparts.

Table 5-5 shows that about one fifth of the OAA and nearly one-third of the AD experienced an unmet need to see a physician during the first half of 1973. These unmet needs were consistently higher among blacks than whites (p (OAA) = .0588; p (AD) = .3146). Lack of transportation was by far the most prominently cited problem among the OAA (44.8%), with lack of money (19.4%) or "too sick" (17.9%) also prominently mentioned. For the AD, lack of money was most important (37.3%), followed by lack of transportation (21.6%). No consistent racial patterns were present here. It is possible, of course, that some of the unmet needs which are blamed on lack of money can be traced to the state Medicaid coverage limitation of four physician visits per month; however, the survey did not collect the data necessary to substantiate this hypothesis. The prevalence of a transportation problem, however, was no surprise in view of the "poor to nonexistent" rating given to the Oklahoma City public transportation system at the beginning of this chapter.

TABLE 5-6. ISSUANCE, OUT-OF-POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:*
OKLAHOMA CITY OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	41.5	42.2	39.5	40.2	42.0	34.3	42.4	42.3	43.9	50.0	53.5	35.5
% that failed to fill or refill as needed	10.5	7.6	16.7	13.7	16.2	0.0	8.2	1.8	27.8	23.2	23.2	27.2
Out-of-pocket expenses												
Percent	90.6	92.5	86.2	87.6	89.9	81.2	92.9	94.2	90.9	91.0	92.0	92.6
Mean ($)	78.70	87.40	54.70	64.30	65.90	64.80	89.40	101.90	45.70	60.00	64.60	40.50
Median ($)	49.40	55.50	40.10	32.70	32.00	44.00	57.90	79.00	39.00	31.40	34.30	23.80

*See footnotes to Table 3-6.

About 69% of both OAA and AD eligibles claimed to have had a routine medical checkup within the 18-month reference period back to January 1972. The credibility of this response, however, is suspect because of variability among the respondents as to what actually constituted a routine checkup. In light of the very large positive response to this question--which seems to contradict common beliefs on the matter--it is likely that some very cursory examinations were counted.

Despite the fact that virtually no coverage existed for prescriptions under Oklahoma's Medicaid program, 89.5% of those in the OAA assistance program who received prescriptions in the first half of 1973 had them all filled and refilled as needed (Table 5-6). For reasons that are not clear, this percentage among AD eligibles was considerably lower--only 76.8% (p = .0069). Thus, while about 91% of the eligibles in both OAA and AD usually paid at least part of the cost of prescriptions themselves, this did not appear to be a major obstacle to obtaining the medicine among the OAA. It apparently did have a much greater impact upon the AD group, however. Though proportionally more blacks than whites failed to fill and refill prescriptions as necessary in most of the subpopulations, the numbers involved were too small to warrant any firm conclusions. (Combining the AD and OAA, there is little difference between whites and blacks regarding the proportion who usually paid out-of-pocket for their prescriptions. In both assistance categories, however, the mean out-of-pocket expense among whites was much higher than among blacks.

The two most frequently cited conditions for which OAA eligibles received prescriptions during 1973 were hypertension (21.8%) and coronary artery disease; among the AD, anxiety/nervous disorders (18.3%) and bronchitis (14.6%) were most often named. Among these subgroups, a very much larger proportion of OAA blacks than whites reported taking medication for coronary artery disease (36.7% v. 12.0%, p = .0011), but the proportions reporting hypertension were almost equal. For the AD, whites were the only ones to report treatment for anxiety/nervous disorders (21.7% v. 0.0%), but proportionally more blacks than whites suffered with bronchitis.

TABLE 5-7. SUBJECTIVE HEALTH RATINGS: OKLAHOMA CITY OAA AND AD ELIGIBLES

Rating	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
Percent												
Excellent	6.7	6.0	7.9	5.5	4.5	8.6	7.6	6.9	7.3	3.7	2.3	9.7
Good	31.1	29.4	34.2	33.1	33.0	28.6	29.7	26.9	39.0	15.2	15.5	12.9
Average	31.8	33.9	26.3	33.9	35.2	31.4	30.2	33.1	22.0	35.4	35.7	32.3
Poor	30.4	30.7	31.6	27.6	27.3	31.4	32.6	33.1	31.7	44.5	45.0	45.2

Approximately 90% of all OAA and AD eligibles, black and white, usually filled their prescriptions at drug stores.

Between 68-69% in both assistance categories were currently using prescription drugs at the time of the survey, and in roughly one-fourth of the cases the nonprescription medicine had been recommended by a physician. These type medications were slightly more common among whites than blacks, and whites were also more likely to have started the nonprescription medicine on the advice of a physician. Over half of the OAA and AD users of nonprescription drugs, however, had decided to do so on their own.

Home Health Care and General Health Status

Barely 6.0% of the OAA and AD eligibles had received any home health services in 1972-73, with the incidence of service split about equally between visiting nurse service and domestic aid. More blacks than whites cited use of these services, but numbers were extremely small. Less than 6% (OAA) and 3% (AD) reported unmet needs for home health care.

Less than 10% of all the eligibles surveyed were currently using walkers or crutches; about 40% of these had paid for the device themselves. Only 4% of the surveyed group indicated an unmet need in this area.

The subjective health ratings of OAA and AD recipients in Oklahoma City are presented in Table 5-7. They reveal that 30% of the former and 44% of the latter considered their health to be "poor." For the OAA, frequent illness and heart trouble were the most common reasons for the rating; for the AD, arthritis/bursitis/rheumatism and frequent illness predominated.

In light of the health status ratings just cited, it is surprising that less than 8% of the OAA-AD sample rated available family health services as poor, and over 50% rated them as either good or excellent. This finding may suggest that these eligibles possess more sophistication in health care matters than is generally presumed. Perhaps they intuitively realize that health status is a function of many factors, of which health services are probably not the most important. Clearly, it would be ludicrous to expect a very high level of health status among two groups such as the elderly and the disabled.

TABLE 5-8. SELECTED DEMOGRAPHIC CHARACTERISTICS: OKLAHOMA CITY AFDC ELIGIBLES*

Characteristic	AFDC Total				Children				Adults			
	T	W	B	AI**	T	W	B	AI	T	W	B	AI
Sex												
% male	39.8	38.6	40.5	42.3	49.9	48.4	50.6	57.9	4.8	8.6	1.9	0.0
% female	60.2	61.4	59.5	57.7	50.1	51.6	49.4	42.1	95.2	91.4	98.1	100.0
Age												
% 1 year or less	7.2	6.3	8.0	3.8	9.3	8.4	10.1	5.3	0.0	0.0	0.0	0.0
% 2-5 years	18.3	17.5	19.1	15.4	23.6	23.2	24.1	21.1	0.0	0.0	0.0	0.0
% 6-20 years	52.0	51.6	52.1	53.9	67.1	68.5	65.9	73.7	0.0	0.0	0.0	0.0
% 21-44 years	20.3	22.0	19.1	23.0	0.0	0.0	0.0	0.0	90.4	89.3	91.6	85.7
% 45 and over	2.1	2.7	1.8	3.8	0.0	0.0	0.0	0.0	9.6	10.8	8.4	14.3
Education												
% none	28.8	29.1	28.2	34.6	36.4	37.9	35.4	36.8	2.4	2.2	0.9	28.6
% Grades 1-6	28.6	31.5	26.7	26.9	35.4	39.6	32.7	31.6	5.3	6.5	3.7	14.3
% Grades 7-12	41.0	37.8	43.6	34.6	27.6	21.4	31.7	31.6	86.9	88.1	88.8	42.9
% post high school	1.3	1.1	1.4	3.8	0.3	0.4	0.2	0.0	4.8	3.2	5.6	14.3
Marital status												
% married	3.7	6.1	1.8	7.7	0.6	0.7	0.5	0.0	14.5	22.6	6.5	28.6
% not married	95.6	92.6	98.0	92.3	99.0	98.2	99.5	100.0	84.1	75.2	92.6	71.4
Case size												
% 3 or less	38.6	43.8	34.2	50.0	35.9	41.1	31.9	42.1	48.0	52.2	42.9	71.4
% 4 or more	61.4	56.2	65.8	50.0	64.1	58.9	68.0	57.9	52.0	47.8	57.1	28.6
Total number of eligibles	904 (14)	372 (6)	506 (8)	26 (0)	700 (11)	280 (5)	401 (6)	19 (0)	204 (3)	92 (1)	105 (2)	7 (0)

*See footnotes to Table 3-8.

**The American Indian classification used only in Oklahoma City was very small and caution should be exercised in drawing inferences. Data collected in this classification are reported also in Tables 5-9 to 5-14.

For those who stated their reasons for rating family health services as poor, lack of coverage and high costs--two closely related factors--were most often mentioned. At the same time, just over half of the full OAA and AD groups surveyed failed to identify any additional health services which they desired. Among those who did have suggestions, payment for prescription/nonprescription drugs (26.4% OAA, 15.9% AD), dental care/dentures without cost (11.0% OAA, 23.2% AD) and eye care/glasses without cost (16.1% OAA, 14.0%AD) were most frequently identified. Note, once again, the strong desire for drug coverage despite extremely low levels of unmet needs.

AFDC Eligibles

Demographic Characteristics

Interview data were collected for 904 AFDC recipients in Oklahoma City. Table 5-8 presents the sample as described by various demographic variables. This was the only site for which separate tabulations were made for American Indians. About 56% of the sample was black; 41% was white; and the ramaining 3% was American Indian. Unfortunately, the very small proportion of American Indians in the sample makes it unrealistic to focus much attention on them as

TABLE 5-9. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE:* OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
	T	W	B	AI	T	W	B	AI	T	W	B	AI
% eligibles hospitalized in 1972-73	24.6	29.3	21.3	19.2	18.3	22.9	15.2	15.8	46.1	48.9	44.8	28.6
Number of admissions per 100 eligibles in 1972-73	33.0	40.1	28.1	19.2	23.4	31.4	18.2	15.8	66.2	68.5	65.7	28.6
Mean length of stay on last admission	6.2	5.9	6.3	13.2	5.4	4.6	6.1	7.7	7.4	7.6	6.5	21.5
Total number of in-patient days per 100 eligibles in 1972-73	204.6	236.6	177.0	253.4	126.4	144.4	111.0	121.7	489.9	520.6	427.0	614.9
Out-of-pocket expense												
Percent	16.2	21.1	12.0	0.0	13.3	12.5	14.8	0.0	20.2	33.3	9.1	0.0
Mean ($)	185.40	209.80	134.50	0.0	138.10	113.70	162.50	0.0	227.50	261.00	60.00	0.0
Median ($)	53.30	55.00	50.00	0.0	30.00	16.70	60.00	0.0	107.50	111.90	50.00	0.0

*See footnotes to Table 3-9.

a separate category for most questions. They will be mentioned only occasionally in the discussion which follows.

Over 77% of the AFDC sample were classified as children, of which about 9% were one year old or younger and an additional 24% were of preschool age. Among the children, 48.4% of the whites and 50.6% of the blacks were male. Among the adults, only 9% of the whites and 2% of the blacks were male, thus reflecting the typical matriarchal composition of AFDC cases.

Most of the eligibles were single, but racial differences were apparent, with 22.6% of the white adults married as compared to only 6.5% of the black adults. The majority of the eligibles were found in cases of size four or more (61.4%). Fewer than forty persons (4%) indicated the presence of any supplemental health insurance, and they were about evenly divided between Blue Cross, Blue Shield, and commercial insurers.

Hospital and Nursing Home Utilization

As indicated in Table 5-9, about one-fourth of the eligibles had been hospitalized in either 1972 or 1973, with an admission rate per 100 AFDC eligibles of 33.0 for this 18-month period. As expected the adults had a much higher proportion hospitalized (46.1%) and total number of admissions per 100 (66.2) than did the children (13.3% admitted. 23.4 admissions per 100). Racial patterns were fairly consistent, with whites generally having a higher proportion hospitalized, more admissions per 100, shorter average lengths of stay and more days of hospitalization per 100 eligibles than blacks. These differences were most pronounced in the proportion of children reporting hospital use within the reference period (22.9% white v. 15.2% black), the number of admissions per 100 children (31.4% white v. 18.2% black) and the total number of days of hospitalization per 100 adults (520.6 for whites, 427.0 for blacks). In all three of these instances p values strongly indicated basic differences between the racial groups rather than simple sampling variability. In the very small American Indian sample, frequency of hospitalization was the lowest of the three racial strata, but average length of stay and total days of hospitalization per 100 were by far the highest.

Once again, it was found that a larger proportion of both children and adults had been hospitalized during the reference period in cases of size three or less than in cases of size four or more, with the differences especially pronounced in the adult category. The initial hypothesis on this point, again, would be that smaller cases tend to include younger families, and a larger percentage of these younger families would have experienced hospitalization within the previous 18 months if only for the purpose of childbirth. This hypothesis was substantiated by a review of the reasons reported for the most recent hospitalization.

Not surprisingly, the total number of inpatient days per 100 AFDC eligibles of 204.6 contrasted sharply with the same statistic for the Oklahoma City OAA (490.9) and the AD (920.2).

Over 90% of the hospitalized AFDC eligibles reported Medicaid as a payor for their most recent hospital stay, apparently reflecting a high level of awareness of this mandatory benefit. In the total AFDC group there was no meaningful difference by race on this point, but for reasons unknown, over 11% more white children than black children reported Medicaid as a payor, while for the adults, blacks held over a 13% margin. Less than 1% cited other insurance as a payor. Of those who incurred out-of-pocket costs for their last hospitalization over three-fourths claimed that Medicaid would not have picked up those costs. The likelihood is that many of these costs may been for "extras," e.g a room television. Also, it is possible that some of the respondents, though eligible for benefits at the time of the survey, were not eligible at the time the hospitalization occurred.

There were no reported admissions to nursing homes among the AFDC eligibles between January 1, 1972 and the date of the interview.

As noted previously, the small number of American Indians in the sample makes statistical statements about them suspect, but it is probably say to say that in terms of the percent hospitalized, they did not seem to differ too much from the rest of the survey population. The other notable fact was that none of the five Indians who were hospitalized encountered any out-of-pocket expense.

Dental Care

Only 13% of the AFDC eligibles professed regular visits to a dentist (Table 5-10). Among the children, more whites (16.8%) than blacks (11.2%) were involved, p = .0053. Once again, however, the relationships were reversed among the adults, where more blacks (15.2% v. 10.9%, p = .1868) made regular visits. This may be explained in part by the fact that proportionally almost five times as many whites as blacks in the adult classification had dentures. Patterns were similar among those who had seen a dentist in 1972-73, except that the overall proportion reporting at least one dental visit in the reference period was higher

TABLE 5-10. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:*
OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
	T	W	B	AI	T	W	B	AI	T	W	B	AI
% that regularly saw a dentist	13.1	15.3	12.1	0.0	13.1	16.8	11.2	0.0	12.7	10.9	15.2	0.0
% that saw a dentist in 1972-73	31.3	39.8	25.3	26.9	27.6	35.7	21.9	26.3	44.1	52.2	39.1	28.6
Out-of-pocket expense for last dental visit												
Percent	33.9	41.9	23.4	57.1	26.4	31.0	20.4	40.0	50.0	64.6	30.0	100.0
Mean ($)	47.60	60.10	22.00	65.00	49.20	68.00	20.90	60.00	46.00	53.30	23.60	70.00
Median ($)	15.10	16.20	12.40	60.00	13.70	13.90	12.00	60.00	46.60	17.50	12.80	80.00
% that had an unmet dental need in 1973	22.8	25.5	21.3	11.5	16.7	18.2	16.0	10.5	43.6	47.8	41.9	14.3
% that had a current dental problem	31.5	37.1	27.9	23.1	25.4	29.3	22.7	26.3	52.5	60.9	47.6	14.3

*See footnotes to Table 3-10.

for all AFDC eligibles (31.3%) and more white than black adults had made a trip during that period.

In a quite unexpected turn of events, the relationship between case size and the regularity of dental visits was the reverse of what was expected, with 16.7% of the children in cases of three or less compared to only 11.1% of those in cases of four or more reporting regular visits. This difference was substantial, p = .0176; it also tends to contradict the discussion in Chapter 3 (p. 38) of this report. Perhaps more surprising, however, is the fact that even adults in cases of three or less claimed higher regularity (15.3%) than adults in cases of four or more (10.4%), though this finding was not as substantial in a statistical sense (p = .1473). Causal factors for these results have not yet been identified.

In light of the relatively complete Medicaid coverage of dental conditions for those under 21 in Oklahoma--as compared to virtually no coverage for adults--it is rather puzzling to find a margin of less than half a percentage point (13.1% children; 12.7% adults) difference in the proportions of those claiming to see a dentist regularly. Again, no explanation is presented except for a suggestion that lack of familiarity with the benefits structure could be depressing the use among the children, as well as the fact that some are too young to need dental care.

Of the 608 children who did not regularly see a dentist, by far the largest proportion, 44.7%, attributed their behavior to a lack of perceived need; 18.3% reported that they were too young, 17.6% lacked money and 7.9% blamed lack of transportation. Among the 178 adults, 33.7% lacked money and 29.2% did not perceive any need. In both the children and adult categories, proportionally more blacks (52.0% and 40.4%, respectively) than whites (34.8% and 15.9%) reported no need to see a dentist (respective p values = .0000 and .0002). However, more whites of all ages (36.5%) than blacks (9.4%) blamed lack of money for their failure to see a dentist regularly, p = .0000. Dentures were also more common among white adults who did not regularly see a dentist (15.9%) than among their black counterparts (3.4%), p = .0026.

Among the nearly one-third of the AFDC population that had seen a dentist during the 1972-73 reference period, there was considerable variation across subpopulations as to the reasons for the last visit. Extractions were far more common among black adults (70.0%) than white adults (47.9%), p = .0183 and were the most common reason in both groups. Extractions were also more common for adults than children (57.8% v. 25.4%, p = .0000). Only a minor racial difference existed for extractions among the children. Thirty-six percent of the total AFDC group listed a general checkup/cleaning for their last visit, 44% of the children and 18.9% of the adults, p = .0000. Dentures represented only a minor problem in Oklahoma City, and though more common among whites, the numbers involved was too small to be reliable.

Over 60% reported Medicaid as the method of payment for the last dental visit--a highly believable result for the children (67.9%), but a highly suspect result for adults (51.1%), since, for them, dental work supposedly was covered only in life-threatening cases or situations of acute pain. Apparently, Oklahoma City AFDC adults either had or claimed to have a rather low threshold of pain, since it is unlikely that half of them had life-threatening dental conditions. One-third of the total group had incurred out-of-pocket expenses for dental care, with important distinctions by race (41.9% white v. 23.4% black, p = .0006) and age (50% adult v. 26.4% children, p = .0000). This latter result is now in keeping with expectations given the benefit structure that existed at the time. Mean out-of-pocket expenditures were, again, significantly higher for whites than for blacks in all subpopulations.

The private dentist was listed as the usual source of care by 50% of those who had regular dental care patterns, with more blacks than whites identifying this source in both adult and children categories. Predictably, private dental care was more frequently reported for adults than for children. Clinics were another major source of care (34.7% of total group); they were more frequently used by whites than blacks. About 5% of the children--all black--listed a public school dental program as the usual source of dental care.

Unmet dental needs were perceived as a problem by almost 44% of the adults and by about 17% of the children, figures which conform with coverage patterns and the fact that a large proportion of the children were reported as too young to have dental problems. Most of the reported unmet needs related to the general complaint of toothache/abscess/swollen jaw, followed next by restorative and extractive procedures. As one might expect, restorative needs were more common among children than adults and the reverse was true for extractive procedures. Of all children in the AFDC sample, only 1.0% were reported to have an unmet need for orthodontia.

The two most often reported barriers to treatment were lack of money (57.8%) and lack of transportation (27.7%). The money problem was far more important for whites than blacks (85.3% v. 34.3%, p = .0000) and a bit more common for adults than children. Transportation, on the other hand, was a more significant barrier for blacks than whites (38.0% v. 13.7%, p = .0000) and for children than adults (35.0% v. 18.0%, p = .0034). Interestingly, over 11% of the adults--yet less than 2% of the children--listed fear as a barrier. This, probably, simply affirms the fact that a child's fear does not typically discourage his parent from requiring a trip to the dentist, while the adult is free

TABLE 5-11. UTILIZATION, OUT OF POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE:* OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
	T	W	B	AI	T	W	B	AI	T	W	B	AI
% that obtained glasses in 1972-73	8.4	10.5	6.5	15.4	6.7	8.9	4.7	15.8	14.2	15.2	13.3	14.3
Out-of-pocket expenses for last pair of glasses												
Percent	57.9	46.2	66.7	100.0	46.8	32.0	57.9	100.0	75.9	71.4	78.6	100.0
Mean ($)	45.40	42.60	46.00	55.00	40.00	28.40	45.70	50.00	50.90	54.00	46.40	70.00
Median ($)	47.20	42.90	48.00	53.30	45.00	30.00	48.30	50.00	49.20	50.00	47.80	70.00
% that had an unmet need for glasses in 1972-73	12.6	12.4	12.6	15.4	8.7	7.1	10.0	5.3	26.0	28.3	22.9	42.9
% that had eye/vision care in 1972-73	17.3	21.0	14.2	23.1	14.9	19.3	11.2	26.3	25.5	26.1	25.7	14.3
Out-of-pocket expenses for eye/vision care												
Percent	32.9	34.8	21.9	100.0	26.4	20.0	25.0	100.0	44.8	62.5	16.7	100.0
Mean ($)	34.50	32.30	34.50	70.00	29.90	31.20	28.30	**	38.50	33.00	50.00	70.00
Median ($)	27.80	23.50	43.30	70.00	13.20	23.50	12.00	**	33.20	23.50	50.00	70.00
% that had an unmet need for eye/vision care in 1973	12.7	12.9	12.8	7.7	8.9	7.9	9.7	5.3	26.0	28.3	24.8	14.3

*See footnotes to Table 3-11.
**Actual dollar amounts not reported--indeterminate.

procrastinate. In addition, of course, the person usually responding to the survey was an adult.

About 31% of the survey population reported a current dental problem--more whites than blacks (p = .0027) and more adults than children (p = .0000). Overall, cavity repair, extraction and general checkup were most often reported, with adult/child and black/white relationships following the pattern described above.

With reference to the American Indian subsample, none reported regular dental visits, but the proportion who had seen a dentist during the reference period was similar to that for the rest of the survey group. The proportion of Indians reporting unmet dental needs and current dental problems were lower than for the other racial classifications, but no significance testing was done because of the small numbers involved.

Vision and Hearing Care

Despite the fact that the Oklahoma Medicaid program provided better coverage for children than adults in obtaining glasses, more adults than children had obtained glasses during the reference period (14.2% v. 6.7%, p = .0003) (Table 5-11). It was also true that proportionally more whites than blacks had obtained glasses in both the adult and children categories (p for children = .0139, p for adults = .3515). There were some differences across the two case size categories, but they did not appear to be significant.

Glasses were obtained from a variety of sources, primarily from the doctor (40.8%) or an eyeglass company/optician (36.8%), with relatively modest differences between adults and children. Racial patterns were present, however. More blacks obtained glasses directly from the doctor (48.5% v. 35.9%, p = .1400), while more whites utilized an optician (46.2% v. 30.3%, p = .0840).

Method of payment for glasses varied widely by both age and race. Overall, most glasses were paid for by self/family (43.4%);* 65.5% of the adults fell in this category compared to only 29.8% of the children (p = .0011). For this method of payment, racial differences existed only among the children (white, 24%; black, 42.1%). The next most common source of payment was Medicaid (39.5%), the program having been utilized more frequently by children than adults (57.4% v. 10.3%, p = .0000) and more often by whites than blacks (46.2% v. 27.3%, p = .0484). The racial patterns just described were unexpected; the more typical situation is for a larger proportion of whites to pay out-of-pocket and more blacks to take advantage of Medicaid. The mean out-of-pocket expenditure was $47.

An unmet need for glasses had been experienced by 12.6% of the AFDC eligibles during the 1972-73 reference period, proportionally more among adults than children (26% v. 8.7%, p = .0000). This result was predictable both with respect to incidence of need and provisions of coverage. Racial differences tended to be small. About one-third of the glasses that were needed but not obtained had been prescribed by a doctor (more adults than children). Lack of money (68.4%) was, by all odds, the most frequently cited reason for not obtaining glasses, with lack of transportation a distant second (13.2%). Just over 5% of those needing glasses did not know where to get them, and almost 2% complained that they had to wait too long to get them.

In both children and adult categories, a larger proportion of whites than blacks had received eye/vision care in 1972-73, but the margin was important only among children (p = .0016). Among both races, proportionally more adults than children had received such care, p-whites = .0823 and p-blacks = .0001. Most of those who saw an eye doctor in 1973 were there for a mechanical eye problem (48.8%) or a general checkup (30.5%). Predictably, the checkup accounted for a relatively larger number of children than adults while the reverse was true for mechanical eye problems.

The principal sources of care were private doctors/private clinics (58.5%) and hospital emergency rooms or clinics (19.5%) with little distinction by race. Children did run lower than adults in both listings, however, a fact that was offset by about 24.5% of the children reporting "other"--presumably an eye check at school--as the last place where an eye doctor was seen.

Nearly 33% of those reporting cited an out-of-pocket expenditure for their last visit with an eye doctor, and Medicaid was reported as a payor by 58.5% of

---

This discussion refers to primary payment mechanism; thus, percentages differ from those in Table 5-11 which reflect any out-of-pocket expense.

TABLE 5-12. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR PHYSICIAN SERVICES:* OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
	T	W	B	AI	T	W	B	AI	T	W	B	AI
% that saw or phoned a physician in 1973	54.5	64.2	48.4	34.6	49.9	61.1	43.4	21.1	70.6	73.9	67.6	71.4
Out-of-pocket expense												
Percent	13.2	14.9	10.8	33.3	12.3	14.7	9.6	25.0	15.3	15.3	13.7	40.0
Mean ($)	21.10	17.30	28.40	70.00	18.30	17.00	21.10	**	25.40	18.00	35.60	70.00
Median ($)	11.90	11.80	13.20	70.00	12.00	12.70	10.20	**	11.90	9.70	20.00	70.00
% that had an unmet need to see a physician in 1973	6.3	7.0	5.9	3.8	3.4	5.0	2.5	0.0	16.2	13.0	19.0	14.3

*See footnotes to Table 3-12.

**Actual dollar amounts not reported--indeterminate.

those who received vision care in 1973. The surprisingly large percentage of Medicaid recovery reported by adults in the face of very limited benefits suggests some confusion on the part of respondents or some substitution, e.g., having a vision problem handled by a regular physician during a visit with him.

There were 115 (12.7%) eligibles who reported that they had experienced an unmet need for vision care in 1973. Though a multitude of needs were listed, the two most common were a routine eye checkup and a need for glasses--either new or replacement.

No sharply distinctive characteristics were apparent among American Indians with respect to eye/vision care.

Only 7 (0.8%) of the AFDC eligibles reported having a hearing aid, and only 11 (1.2%) reported an unmet need for one. Most of the 5.5% who had seen a physician about an ear problem during 1973 did so because of an infection. Only 25 (2.8%) felt that they had an unmet need for hearing care and just over one-third of this group complained of hearing loss.

Physician Services and Prescriptions

Table 5-12 shows the percent of eligibles that utilized physician services. Over half (54.5%) of this AFDC sample reported that they had either seen or phoned a physician sometime during the first half of 1973. As can be seen, differences in physician contacts were substantial both by race (64.2% white, 48.4% black, p = .0000) and age (49.9% children, 70.6% adult, p = .0000).

Not shown in Table 5-12 are some interesting differences in physician use by case size. Predictably, the proportion is much higher among children in families of three or less than in those of four or more (62.9% v. 42.5%, p = .0000). Inexplicable, however, is the significant racial difference which appears only in cases of four or more, where 60.8% of the whites v. 38.7% of the blacks had contacted a physician (p = .0000). This difference persisted among both adults and children in this group, whereas the racial proportions were virtually equal across-the-board in the smaller cases.

The mean number of physician visits during 1973 among those who saw a physician at all was 5.5, with adults averaging 9.6 visits and children averaging 3.7.

From January 1972 through the date of the survey in the summer of 1973, three-fourths of the AFDC eligibles had either seen or phoned a physician--71.2% of the children and 84.8% of the adults. Coupled with the fact that 95.9% of the group surveyed indicated either that they had a regular physician or that they saw a physician when necessary, it would appear that access to primary care services is not a problem of significance for the AFDC in Oklahoma City. This is further substantiated by the report, shown in Table 5-12, that only 6.3% had experienced an unmet need to see a physician in 1973. As found elsewhere, this problem is more common among adults (16.2%), an outcome which probably reflects the natural tendency of parents to attach a higher priority to the needs of their offspring than to their own needs. American Indians showed no sharp differences in this area. Thus, though lack of money was much more frequently cited as a reason for adults not seeing a physician when needed than for children (33.3% v. 14.3%), there is an inference that this reflects a value judgment on the part of the family head; i.e., other things being equal, adults are more likely to forego treatment for lack of funds than children with the same problem (symptoms)

Chronic health care problems were reported by 23.9% of the eligibles with the proportion for adults (43.8%) much higher than that for children (15.8%), p = .0000. Though for the total group there was only a 1% variation by race, this was the result of greater incidence among blacks in the children category and greater incidence among whites in the adult category. Most frequently identified as the existing chronic conditions among adults were kidney disorders (17.5%) hypertension (15.9%) and gastrointestinal disorders (14.3%). The first and last of the above were more prevalent among blacks, but, surprisingly, hypertension occurred slightly more often among whites. Among children, upper respiratory infections (18.2%), acute bronchitis (16.4%) and coronary artery disease (12.7%) were most often listed. In the first two of these more whites than blacks were afflicted, but coronary artery disease fell more heavily on blacks. In each of the above, however, numbers were small because of the wide variety of other conditions also listed. Note that about three-fourths of those being treated for a chronic condition(s) usually dealt with a private physician, with relatively little variation in this pattern by age or race. Among these chronic eligibles, approximately 37% (more whites than blacks, p = .0344), usually received an injection from their physician; 67% usually received a prescription (more adults than children, p = .0113); 14% usually received free medication (more whites than blacks, p = .1089); and less than 2%--all blacks--were urged to purchase some nonprescription medication.

Among eligibles whose last physician visit in 1973 was not for a chronic condition, 35% received an injection, 44% received a prescription, 9% got free medication and 9% were urged to buy some nonprescription medicine. For the most part, the relationships as to race and age were similar to those found among the chronic cases.

Medicaid was identified as the source of payment for well over 80% of all AFDC physician visits, combining those for both chronic and nonchronic cases.

Only 13.2% of the eligibles reported out-of-pocket expenses for their last (or their typical) visit, and the mean expense incurred was $21. Though Table 5-12 shows a sharply higher percentage of American Indians incurring out-of-pocket expenses of a significantly higher mean value, the sample size is simply too small to warrant much credibility.

The most common place (67% overall) for seeing the doctor--for adults and children, blacks and whites--was in his private office or at a private clinic. Substantially more whites than blacks had this pattern, however. The second most common location (21%) was the hospital emergency room or clinic; this, by a wide margin, was more common among blacks. Blacks also made much greater use of nonprivate clinics (6.5% overall), but so few whites were found in this area that no meaningful p-value could be computed.

Of the 6.3% of the AFDC sample with unmet needs to see a physician during 1973, more adults than children (p = .0000) and more whites than blacks (p = .2547) were reported. Taken solely among adults, however, more blacks reported unmet needs (p = .1287). Lack of transportation was by far the most frequently cited barrier to needed care (40.5%), with the problem affecting about twice as large a proportion of children as adults and no big difference by race. The second most common barrier was lack of money (18.9%)--probably a reflection of ignorance of benefits or, in part, of those who needed more than the four visits per month that were provided under Oklahoma Medicaid. Note, however, that those not getting needed physician services because of lack of transportation and/or money constituted less than 2.5% of the total AFDC sample--hardly a significant number.

Approximately 36% of the AFDC total claimed to have had a general checkup since January 1972. No important differences appeared either between blacks and whites or adults and children. It is possible, however, that this figure is inflated (see p. 32).

No separate analysis of physician visits was conducted for American Indians. Again, they seemed to follow a pattern generally similar to the other AFDC eligibles.

The inability to fill and refill prescriptions as needed was a problem of some consequence, at least among AFDC adults, as shown in Table 5-13. While about 88% of the children's 1973 prescriptions were filled and refilled as needed, only about 78% of the adults were as successful. In percentage terms, Indians seemed to fare more poorly than others, but once again, the sample was small. The most often cited reason for not filling a prescription was lack of money (64%). Considering the fact that there was virtually no Medicaid coverage provided for prescriptions, however, the outcome does not seem too startling. Only 2.8% claimed payment by Medicaid, while over 94% paid for the prescription(s) themselves. Differences by race and age were modest, but whites did have a higher mean expenditure than blacks.

The drugstore was the almost universal source of prescriptions in Oklahoma City--accounting for between 94.7% and 97.5% of all prescriptions for blacks and whites, adults and children.

TABLE 5-13. ISSUANCE, OUT OF POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:*
OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
	T	W	B	AI	T	W	B	AI	T	W	B	AI
% that received a prescription in 1973	38.7	43.8	35.6	26.9	33.6	39.3	29.9	26.3	56.4	57.6	57.1	28.6
% of eligibles that failed to fill or refill as needed	16.0	15.3	16.1	28.6	12.3	12.7	11.7	20.0	23.5	20.8	25.0	50.0
Out-of-pocket expense for prescriptions												
Percent	94.1	95.1	94.5	53.8	93.5	95.0	93.7	50.0	95.8	95.5	96.9	66.7
Mean ($)	19.40	22.10	17.20	4.70	12.30	15.60	9.80	7.00	35.80	37.00	35.20	25.00
Median ($)	5.90	7.40	4.70	4.70	4.30	5.20	3.90	7.00	23.20	24.60	18.20	25.00

*See footnotes to Table 3-13.

Over 67% of the AFDC sample were currently using some nonprescription medicine-more whites than blacks (p = .0000) and more adults than children (p = .0008). Only 19% of these indicated that a physician had recommended the medication, with the majority (63%) reporting that a friend or relative had suggested its use. This was especially true among children. Mean expense for these medicines was just over $19--again more for whites than for blacks.

Home Health Care, Family Growth and Planning, and General Health Status

Only 6% of the AFDC group reported use of home health care between January 1972 and the interview date; 100% of those reporting had used only visiting nurse services, and there were no differences of interest by age or racial category. Unmet needs were reported by 1% of the sample.

With respect to walkers/crutches, only 2.3% of the sample reported their use during the previous 18 months and only 2.5% reported an unmet need.

Almost half (49.0%) of the female eligibles between the ages of 13 and 50 were either currently pregnant or had been pregnant during the last five years--47.4% of the whites and 50.6% of the blacks. Note that 32.7% of the female children between 13 and 21 had been pregnant in this period. There was a substantial difference by race among these children--25% white, 37.9% black, p = .0933. A matter which surely deserves further investigation is that in cases of four or more, only 13.8% of the female children from 13-21 had been pregnant during a five-year period, whereas in cases of three or less the proportion was 56.6% (p = .0000). This is an enormous difference, and it may suggest that peer control among siblings has more impact than the presumably more direct parental control possible in a smaller family in controlling social behavior.

AFDC mothers, according to the data, had good access to prenatal, postnatal and neonatal care. Over 95% of the women whose last baby was born in 1972 or 1973 reported that the child had been delivered by a physician--the figure was 100% for the "child-mothers." Approximately 72% and 89%, respectively, had

TABLE 5-14. SUBJECTIVE HEALTH RATINGS: OKLAHOMA CITY AFDC ELIGIBLES

	AFDC Total				Children				Adults			
Rating	T	W	B	AI	T	W	B	AI	T	W	B	AI
Percent												
Excellent	16.9	14.2	19.6	3.8	19.9	17.5	22.2	5.3	6.9	4.3	9.5	0.0
Good	55.2	54.3	55.7	57.7	59.9	60.0	59.9	57.9	39.2	37.0	40.0	57.1
Average	20.7	22.0	18.8	38.5	17.1	17.9	15.7	36.8	32.8	34.8	30.5	42.9
Poor	7.1	9.1	5.9	0.0	3.0	4.3	2.2	0.0	21.1	23.9	20.0	0.0

received regular prenatal care during the first and third trimesters of their last pregnancy, and 84% had received regular neonatal care. The only significant difference by race existed during the first trimester, during which proportionally more blacks than whites (p = .0018) had regular visits. This was a midly surprising result.

Less than 8% of those pregnant within the last five years reported that their last pregnancy did not result in a live birth, and over three-fifths of these indicated a miscarriage.

Of those pregnant in the last five years, 21% planned to have more children. Approximately 50% of all female eligibles between 13 and 50 had at some time received professional birth control advice--61% of the adults and 29% of the children. The most frequent source of this advice was the private physician, and less than 30% of those getting advice incurred a fee--with almost 40% of those reporting Medicaid as the payor. Only 40% of these eligible women reported having experienced an unmet need for birth control advice.

The subjective health ratings of Oklahoma City AFDC eligibles are shown in Table 5-14. As noted, "poor" health was reported about three times as frequently among adults as among children, p = .0000. Substantially more whites than blacks also rated their health as poor, p = .0354.

The health services available to these eligibles were generally thought to be acceptable. Less than 8% rated the services as poor, with the most frequent complaints relating to lack of coverage and high costs. Barely 4% of the responders volunteered the observation that the quality of care was poor--a complaint which was registered only by blacks in response to the question, "Why do you say that available health services are poor?" Almost 40% failed to come up with any suggestions for additional services from which they could benefit. The items most frequently mentioned by the others were coverage for prescription and nonprescription drugs (27.2%) and coverage for dental care (26.7%). The small American Indian sample had no outstanding differences from the rest of the group. In general, then, the surveyed population seemed to be reasonably satisfied with available services.

CHAPTER 6

A PROFILE OF THE HEALTH CARE BEHAVIOR PATTERNS OF TRENTON PUBLIC ASSISTANCE RECIPIENTS

The Setting

The Trenton survey encompassed all of Mercer County (see Chap. 2). While the vast majority of the sample eligibles were from the city of Trenton proper, there were a few who lived in the suburban and rural perimeter of the county, including some in the generally well-to-do community of Princeton. This notwithstanding, the sample was, for the most part, highly urban and, in this respect, comparable to those for the other three sites.

At the time of the survey, the New Jersey Medicaid program was one of the most generous in the country, providing, in addition to the basic mandatory benefits, coverage for virtually every optional service allowable under Title XIX. While providing great breadth of coverage, however, benefits were available only for the categorically needy, with no provision for the "medically indigent." Since this study focused only on the categorically needy, this presented no problem.

The two most recognizable poverty pockets in Trenton had both been targets of major urban renewal efforts during recent years. Colport, located in the north central section of the city was probably the worst of these. Formerly a largely black section of the city, it had changed in recent years to a predominantly Puerto Rican community. Despite renewal efforts, it continued to be characterized by low income, high mobility and high crime rates. A second poverty pocket, the Mercer-Jackson district, was in the south central portion of the city and was split about evenly between black and Puerto Rican residents.

The city was well served by four major hospitals: Mercer Medical Center on the west, Helene Fuld on the north, St. Francis on the east, and the new Hamilton Hospital on the south--located in Hamilton Township but with a Trenton mailing address. In addition, the city of Princeton, toward the edge of Mercer County, had its own hospital. Note that at the time of the survey the Mercer Medical Center was in the process of setting up an HMO--the first in the state--but it was not yet operational.

The entire Mercer County area is well served by a government subsidized transportation system--Mercer Metro--which reputedly provides good service. All of the hospitals are located on bus routes.

There is a plentiful supply of physicians in the area. In addition to being the state capitol and the headquarters of the state medical society, Trenton has several very attractive "bedroom" communities nearby, and many of the physicians have relationships with one or more of the medical schools in nearby Philadelphia or the New Jersey College of Medicine and Surgery. Estimates by Medicaid officials in Trenton indicated that somewhere between 62-77% of the physicians, dentists, optometrists and podiatrists in the area had received payments from the system during 1971-72. This suggests a rather good choice

TABLE 6-1. SELECTED DEMOGRAPHIC CHARACTERISTICS: TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
Characteristic	T	W	B	T	W	B	T	W	B	T	W	B
Sex												
% male	27.9	34.9	20.9	31.3	35.0	28.6	23.7	34.8	6.7	37.5	47.6	28.8
% female	72.1	65.1	79.1	68.7	65.0	71.4	76.3	65.2	93.3	62.5	52.4	71.2
Age												
% less than 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.8	30.0	36.9
% 45-64	7.0	4.6	9.3	10.4	5.0	14.3	2.6	4.3	0.0	61.0	70.1	53.4
% 65-74	51.2	51.2	51.2	85.4	95.0	78.6	7.9	13.0	0.0	5.1	0.0	9.6
% over 75	40.7	44.2	37.3	2.1	0.0	3.6	89.5	82.7	100.0	0.0	0.0	0.0
Education												
% none	7.0	9.3	4.7	2.1	0.0	3.6	13.2	17.4	6.7	5.9	7.9	4.1
% Grades 1-6	45.3	32.6	58.1	50.0	30.0	64.3	39.5	34.8	46.7	27.2	20.6	32.9
% Grades 7-12	37.2	48.8	25.6	33.4	55.0	17.9	42.1	43.5	40.0	59.5	66.7	53.4
% post high school	1.2	2.3	0.0	0.0	0.0	0.0	2.6	4.3	0.0	0.0	0.0	0.0
Marital status												
% married	19.8	16.3	23.3	31.3	25.0	35.7	5.3	8.7	0.0	16.2	20.6	12.3
% not married	80.2	83.7	76.7	68.7	75.0	64.3	94.7	91.3	100.0	83.8	79.4	87.7
Living arrangement												
% living alone	59.3	65.1	53.5	47.9	60.0	39.3	73.7	69.6	80.0	50.0	52.4	47.9
% not living alone	40.7	34.9	46.5	52.1	40.0	60.7	26.3	30.4	20.0	50.0	47.6	52.1
Total number of eligibles	86 (0)	43 (0)	43 (0)	48 (0)	20 (0)	28 (0)	38 (0)	23 (0)	15 (0)	132 (4)	61 (2)	71 (2)

*See footnotes to Table 3-1

of providers for most eligibles, and accessibility did not appear to be a major problem. Physicians were reimbursed on the basis of customary charges, with no limit on services except that preauthorization was needed for cosmetic surgery.

Not only did Trenton have a good network of private pharmacies, but it was also notable for the exceptionally good liaison that existed between the medical, pharmaceutical and legal professions, whose professional associations hold joint meetings periodically.

While a few voluntary health organizations existed in the area, their overall role in the provision of health services was minimal, due to the excellent coverage afforded under the Medicaid program.

AD and OAA Eligibles

Demographic Characteristics

Data were collected and tabulated on a total of 132 AD and 86 OAA recipients in Trenton. Table 6-1 presents these eligibles cross-classified by various demographic variables. Among the AD sample of 132, 71 (53.8%) were black and 61 (46.2%) were white. There were almost twice as many females as males, and less than half of the females were still within the effective child-bearing age range. Only 16% of the AD eligibles were married, and exactly half

TABLE 6-2. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE:* TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% hospitalized in 1972-73	33.7	37.2	30.2	29.2	35.0	25.0	39.5	39.1	40.0	45.5	34.4	54.9
Number of admissions per 100 eligibles in 1972-73	60.5	65.1	55.8	45.8	50.0	42.9	78.9	78.3	80.0	93.9	62.3	121.1
Mean length of stay on last admission	14.6	14.2	15.1	15.4	13.0	17.9	13.7	15.2	10.2	15.2	11.0	17.5
Total number of in-patient days per 100 eligibles	883.3	924.4	842.6	705.3	650.0	767.9	1080.9	1190.2	816	1427.3	685.3	2119.2
Out-of-pocket expense												
Percent	13.8	18.7	7.7	14.3	14.3	14.3	13.3	22.2	0.0	3.3	4.8	2.6
Mean ($)	36.30	31.70	50.00	50.00	50.00	50.00	22.50	22.50	--	457.50	900.00	15.00
Median ($)	40.00	30.00	50.00	50.00	50.00	50.00	22.50	22.50	--	800.00	900.00	15.00

*See footnotes to Table 3-2.

lived alone. Just under 7%--nine persons--of the group reported having some form of additional health insurance (not including Medicare).

Among the OAA, the 86 eligibles were split exactly evenly by race, while 80% were not married and 59% lived alone. About 56% (48) fell in the 65-74 age category, with the remaining 44% in the 75 or over bracket. Nearly all (93.2%) of the group reported that they were Medicare beneficiaries, but less than 5% claimed to have private health insurance coverage.

Hospitalization and Nursing Home Care

The hospital admission rate was considerably higher among AD eligibles than among the OAA. Note that 45.5% of the sample had been admitted to a hospital at least once during the 18-month reference period, for an admission rate of 93.9 per 100 eligibles. In contrast, 33.7% of the OAA sample had been hospitalized during the same period for an admission rate of 60.5 admissions per 100 eligibles. Racial differences, though appearing in most subclassifications, were most pronounced among the AD, where the percent hospitalized was 20% higher among blacks than whites, and the admissions per 100 were almost twice as high among blacks. In addition to being hospitalized more frequently than their OAA counterparts, the AD had a slightly longer average length of stay (15.2 days v. 14.6 days) which led to a much higher (62%) total number of inpatient days per 100 eligibles among the AD--1,427 v. 883. Racial differences, though large, were inconsistent. Among the younger elderly (65-74) and the AD, blacks had the higher level of inpatient days--in the latter case, by a margin of over three to one. Among the very old (75 and over), however, blacks had fewer inpatient days than whites. Heart disease/attack/surgery were the most frequently cited reasons for hospitalization in both groups.

TABLE 6-3. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:* TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	9.4	4.7	14.3	10.6	5.0	14.8	7.9	4.3	13.3	17.4	18.0	16.9
% saw a dentist in 1972-73	17.6	9.3	26.2	23.4	10.0	33.3	10.5	8.7	13.4	35.6	24.6	45.1
Out-of-pocket expense												
Percent	13.3	25.0	9.1	18.2	50.0	11.1	0.0	0.0	0.0	4.3	0.0	6.2
Mean ($)	30.00	30.00	30.00	30.00	30.00	30.00	--	--	--	125.00	--	125.00
Median ($)	30.00	30.00	30.00	30.00	30.00	30.00	--	--	--	125.00	--	125.00
% that had unmet dental needs in 1972-73	12.9	11.6	14.3	17.0	15.0	18.5	7.9	8.7	6.7	23.5	13.1	32.4
% that had current dental problems	18.8	16.3	21.4	19.1	15.0	22.2	18.4	17.4	20.0	28.8	21.3	35.2

*See footnotes to Table 3-3.

Medicaid was reported as the payor for the last hospital visit by 85% of the AD eligibles, with virtually no variation by race. Among the OAA, 79.3% said that Medicaid paid and nearly 52% named Medicare as a payor. Interestingly, more whites than blacks named Medicare, while for Medicaid the relationships were reversed--with about the same percentage margin. Out-of-pocket expenses were incurred by 3.3% of the AD and 13.8% of the OAA, but the numbers involved (two and four persons, respectively) were very small, reflecting both the excellen benefit package in New Jersey and the high level of knowledge about the Medicaid program among eligibles. Mean out-of-pocket costs were extremely modest for the four OAA eligibles who incurred them ($36.30). For the two AD recipients who had such costs, one spent under $20 while the other reported an outlay of between $800 and $1,000.

Nursing home utilization was nonexistent among the AD eligibles and was too low among the OAA classification (two persons) to permit analysis.

Dental Care

A summary of the dental care patterns and needs of the OAA and AD groups surveyed appears in Table 6-3. Both need for and use of dental care was substantially lower among the OAA sample than among the AD. This was probably due, at least in part, to the much higher incidence of dentures among the OAA group. While the percentage differences appear significant, the absolute numbers of individuals involved are small.

Among the eligibles who did not regularly see a dentist, there was a conflicting racial pattern between the aid categories. Among the OAA, 33.3% (12) of the blacks compared to only 2.4% (1) of the whites (p = .0002) reported no perceived need; among the AD eligibles this was reversed (36.0% white, 23.7% black, p = .0800). By far the most common reason for not seeing a dentist, however, was the fact that the welfare recipient already had dentures. This was true for 61% of the OAA and 40.4% of the AD who did not have a regular dental pattern. In both categories, more whites than blacks (70.7% v. 50% for OAA, p = .0316; 48% v. 33.9% for AD, p = .0674), gave this reason. The discrepancy was particularly noticeable among the younger elderly, age 65-74, where 73.7% of the whites reported dentures to only 43.5% of the blacks. Note that less than 2% of the OAA and less than 5% of the AD cited lack of money as a barrier to regular dental care--a tribute to the breadth of benefits in New Jersey.

The greater prevalence of dentures among whites is almost certainly one of the important explanatory variables for more blacks than whites having seen a dentist in 1972-73 (p, OAA = .0210; p, AD = .0071). In the OAA category proportionally more blacks also reported regular dental visits, though there was little racial variation among the AD. Fear was cited as a barrier by 6.5% of the OAA and 8.3% of the AD, again with an inconcistent racial pattern (more whites among OAA; more blacks among AD).*

Among the eligibles who had seen a dentist in 1972 or 1973, there seemed to have been some underreporting for the earlier year. This is not too surprising; dental visits do not generally evoke as accurate a recall as hospital visits.**

Over 90% of the AD eligibles who had seen a dentist reported that Medicaid had paid for the latest visit; only 4.3% (2 persons, both black) reported any out-of-pocket expenses, and only one of these remembered how much--about $125. Two-thirds of the OAA users of dental care reported that Medicaid paid for the service, while 26.7% gave credit to Medicare. Only two persons (13.3%), one black and one white, both under 75, reported out-of-pocket expenses--in both cases under $40. All but one of the OAA and four of the AD dealt with a private dentist.

While less than 13% of the OAA group had unmet dental needs during 1972-73, 23.5% of the AD made this complaint. Though the numbers involved are too small to provide much insight, it is worth noting that proportionally more whites cited unmet needs for dentures even though more whites already had same. Among the AD, only blacks reported extraction as an unmet need; more blacks in the AD group also reported toothache/abscess/swollen jaw. Among the current needs reported, dentures and extractions again predominated.

Vision and Hearing Care

As reflected in Table 6-4, vision problems struck a large proportion of the welfare recipients surveyed during 1972-73. Over 40% in both aid categories had obtained eyeglasses during the approximately 18-month reference period, and a similar percentage in each group also obtained other eye/vision care services. Excluding the OAA over 75 group for a moment, it can be noted that in all other subpopulations proportionally more blacks than whites obtained eyeglasses, had an unmet need for eyeglasses, obtained other vision services and had an unmet

---

*See discussion on page 26, above.

**See discussion and note, page 27, above.

TABLE 6-4. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR EYE/VISION CARE:* TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that obtained eyeglasses in 1972-73	42.4	41.9	42.9	44.7	30.0	55.6	39.5	52.2	20.0	44.7	44.3	45.1
Out-of-pocket expense												
Percent	11.1	16.7	5.6	9.5	16.7	6.7	13.3	16.7	0.0	6.8	3.7	9.4
Mean ($)	39.20	29.00	70.00	60.00	50.00	70.00	18.50	18.50	--	21.00	7.00	25.70
Median ($)	40.00	30.00	70.00	60.00	50.00	0.00	23.50	23.50	--	23.50	7.00	26.70
% that had an unmet need for glasses in 1972-73	21.2	18.6	23.8	23.4	20.0	25.9	18.4	17.4	20.0	12.9	8.2	16.9
% that obtained eye/vision care in 1972-73	48.2	39.5	57.2	51.0	30.0	66.6	44.7	47.8	40.0	44.7	37.7	50.7
Out-of-pocket expenses												
Percent	12.0	8.3	15.4	0.0	0.0	0.0	23.1	11.1	50.0	6.1	0.0	8.0
Mean ($)	24.00	30.00	21.00	--	--	--	24.00	30.00	21.00	17.00	--	17.00
Median ($)	26.70	30.00	23.50	--	--	--	26.70	30.00	23.50	17.00	--	17.00
% that had an unmet need for eye/vision care in 1973	18.8	16.3	21.4	17.0	10.0	22.2	21.1	21.7	20.0	13.6	8.2	18.3

*See footnote, Table 3-4.

need for other vision services. While persistent, however, these racial differences varied considerably in magnitude among the classifications.

For reasons that are not immediately apparent, this pattern was reversed for OAA recipients over age 75. Here, proportionally more whites than blacks reported in three of the four categories just mentioned, with a slightly larger percentage of blacks present only in the area of unmet needs for glasses. It is interesting to note, however, that in response to a question asking when the last visit or phone call to a physician about a vision problem had occurred, the OAA over 75 subpopulation was the only one where proportionally more blacks than whites answered "prior to 1972." In this context, perhaps, more recent activity in all subgroups may be viewed as more-or-less evening services out over time--though no clue is offered to explain the reasons for disparate needs in the past.

All except one of the eligibles who had obtained glasses since January 1972 had had the glasses prescribed by a doctor, and over three-fourths had obtained them from the doctor. Between 12-14% had acquired their glasses from an eyeglass company/optician.

Over three-fourths of the elderly and almost 97% of the AD cited Medicaid as the method of payment for their last pair of glasses--no difference by race. In addition, nearly 17% of the elderly named Medicare as the payor. Only 11%

of the elderly and 7% of the AD encountered out-of-pocket expenses for glasses, nearly the same percentages as for other vision services. Proportionally more blacks than whites encountered out-of-pocket expenses for vision services in both aid categories; the same was true among the AD for glasses, though more whites among the OAA used their own resources. The total number incurring these expenses, however, was too small to support any strong inferences.

In both welfare categories mechanical eye problems predominated as the reason for the last visit to an eye doctor--60% (15) of the OAA and 66.7% (22) of the AD reporting, respectively. No other particular problem was mentioned by more than three eligibles in either category.

Of all those who had seen an eye doctor for a general vision problem during the reporting period, only three in each category (OAA and AD) had done so in a location other than a private physician's office.

While eighteen (21.2%) of the OAA sample and seventeen (12.9%) of the AD sample reported unmet needs for glasses between January 1, 1972 and the interview date, less than half in either group had had the allegedly needed glasses prescribed by a doctor. The most frequently identified reason for not getting the needed glasses was lack of transportation, mentioned by five OAA and six AD eligibles. It must be concluded, however, that this is not so much a reflection of poor transportation facilities in Trenton as it is of an excellent coverage pattern which almost eliminated "lack of money" as a complaint. Further, especially for the AD complainants, the response "lack of transportation" probably reflected inability of the individual, because of physical handicap, to use public transportation rather than the lack thereof.

Of those in both categories who had recently seen an eye doctor for a general vision problem, about one-third had received an injection of some kind during their last visit and about one-fourth had been issued a prescription for medication.

As seen from the data, only two AD and three OAA eligibles incurred any out-of-pocket expenses for general vision care. Medicaid paid for over 90% of the AD cases and 72% of the OAA cases, with 24% of the latter reporting Medicare as the payor.

Of the 16 OAA and 17 AD eligibles who complained of an unmet need to see an eye doctor, six of the former and seven of the latter cited a need to obtain or change glasses. No other complaint was mentioned by more than three OAA eligibles, though six of the AD, all black, reported poor vision/can't see right as their complaint.

Only three OAA and one AD recipient, respectively reported having a hearing aid at the time of the survey. Five OAA and nine AD reported an unmet need in this area, and only one of the former and four of the latter had been prescribed by a physician. Lack of money was given as the reason for not obtaining a needed hearing aid by only two AD recipients. Very few in either aid category had visited the doctor about a hearing problem during the recall period, and of those, not a single one had incurred any out-of-pocket expenses. This again reflects the breadth of coverage under New Jersey Medicaid.

TABLE 6-5. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR PHYSICIAN SERVICES:* TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	68.2	65.1	71.4	68.1	65.0	70.4	68.4	65.2	73.3	81.1	73.8	87.3
Out-of-pocket expense												
Percent	19.4	16.7	21.9	17.1	21.4	14.3	22.2	12.5	36.4	4.5	2.1	6.3
Mean ($)	9.00	8.20	9.50	8.25	7.00	9.50	9.50	9.50	9.50	11.70	30.00	7.10
Median ($)	8.70	7.80	9.10	7.80	7.00	9.50	9.40	9.50	9.10	9.00	30.00	7.00
% that had an unmet need to see a physician in 1973	9.4	14.0	4.8	8.5	15.0	3.7	10.5	13.0	6.7	12.1	8.2	15.5

*See footnote to Table 3-5.

Physician Services and Prescriptions

Use of physician services by OAA and AD recipients in Trenton is reflected in Table 6-5, with AD eligibles manifesting slightly higher levels of use (p = .0149) and unmet needs (p = .2678) for these services than the OAA. While just over three-fourths of the OAA group reported having seen a physician since January 1972, the comparable statistic among the AD was 95.5%. Part, but not all, of this difference may be attributable to the higher incidence of chronic conditions reported by the AD (73.8%) than by the OAA (65.5%), p = .0952. More blacks than whites in both categories reported chronic conditions, by a combined margin in both welfare categories of 63% of the whites and 77.2% of the blacks, p = .0110.

The five most frequently mentioned conditions among the OAA respondents citing chronic problems were, in descending order, coronary artery disease (36.8%), hypertension (28.9%), diabetes (23.7%), arthritis/rheumatism/bursitis (18.4%) and kidney disorders (10.5%). Among the AD, the common complaints were hypertension (20.3%), diabetes (19%), coronary artery disease (16.5), anxiety/nervous disorders (13.9%) and arthritis/rheumatism/bursitis (11.4%). Hypertension, predictably, was proportionally more common among blacks than whites in both groups by a total combined margin of almost two to one. Coronary artery disease was more prevalent among black OAA recipients, but no racial difference was reflected among the AD. The reverse was true for diabetes.

Interestingly, blacks and whites had almost identical patterns of care for chronic conditions in Trenton, with 68% of the OAA and 72% of the AD utilizing a private physician and most of the rest using the hospital emergency room or clinic.

About one-fourth of the chronic patients among the OAA and one-third of those among the AD usually received injections when they saw their physician. In contrast, 90% of the OAA and 96% of the AD received prescriptions, with 10.5% and 3.8%, respectively, being given free sample medications. Just over 5% of the OAA and less than 2% of the AD received neither a prescription nor a sample.

None of these respondents reported having nonprescription medicine recommended.

Among those without chronic conditions who had seen a physician since January 1, 1973 (a relatively small group of only 24 OAA and 32 AD), slightly larger proportions received an injection during their last visit (37.5% OAA, 46.9% AD) than was true for those reporting chronic conditions. The proportion receiving prescriptions, however, was considerably lower (70.8% and 84.4%, respectively). Free samples were not a factor for this group and, once again, no nonprescription medicines were recommended. Reasons for the last visit to the doctor were widely dispersed in this group, although 8 (25%) of the AD cases involved upper respiratory infections.

Only 12 of the 62 OAA (13%) and five of the 111 AD (6%) had incurred any out-of-pocket expenses in connection with their visits to physicians after January 1, 1973, with proportionally more whites than blacks so reporting in all subpopulations. The small numbers involved, however, prevent any strong inferences in this regard. Mean expenditures were modest--under $15 for both welfare categories--and showed no consistent racial pattern.

Over 70% of those without chronic conditions in both welfare categories saw their physician in a private doctor's office/clinic on their last visit, with slightly more blacks than whites so reporting. Age seemed to have some influence, here, with almost 92% of the OAA over 75 using private physicians. Only one white in each aid category reported a house call, and about 17-19% in each category used the hospital emergency room or clinic for the last physician visit. More blacks than whites used this source, but again, numbers were too small to do more than hint at a pattern.

Of the total groups surveyed, 61% of the OAA and 76% of the AD reported having a regular physician, with very little difference by age or race.

An unsatisfied need to see a physician during 1973 was reported by 8 (9.4%) OAA eligibles--with a three to one ratio of whites over blacks. Among the AD, 16 (12.1%) had this complaint--about twice as many blacks as whites. It is instructive to note that not a single eligible in either assistance category cited lack of money as the basis for the unmet need. Among the elderly, three (37.5%) gave fear as their reason for not seeing the doctor and two (25%) reported a transportation problem. Among the AD, lack of transportation (six, 37.5%) and "too sick" (five, 31.3%) were the major barriers, with fear and "not sick enough" both being reported by three individuals.

Slightly over three-fifths of both assistance group samples reported having had a routine physical checkup during the first half of 1973. This figure as noted previously, should be viewed with some skepticism, as it is probably overstated.* Though no important racial pattern was present among the elderly, substantially more whites than blacks reported this service among the AD.

Over 95% of the OAA and over 90% of the AD who had received prescriptions during the first part of 1973 had both filled and refilled them as necessary (Table 6-6). Furthermore, less than 5% in either category had incurred any

---

*See discussion on page 32.

TABLE 6-6. ISSUANCE, OUT-OF-POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:* TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
	T	W	B	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	50.6	46.5	54.8	51.1	50.0	51.9	50.0	43.5	60.0	61.4	59.0	63.4
% that failed to fill or refill as needed	4.7	5.0	4.3	8.3	10.0	7.1	0.0	0.0	0.0	9.9	13.9	6.7
Out-of-pocket expense												
Percent	4.4	2.9	5.9	2.6	5.9	0.0	6.7	0.0	15.4	3.3	5.6	1.5
Mean ($)	7.00	**	7.00	**	**	--	7.00	--	7.00	34.00	4.00	124.00
Median ($)	7.00	**	7.00	**	**	--	7.00	--	7.00	4.70	3.60	124.00

*See footnotes to Table 3-6.

**Respondent gave no answer/don't know--could not calculate.

out-of-pocket expenses for their medications. No consistent racial pattern was present, and out-of-pocket expenses were, on the average, very low except for the sole black AD recipient who reported expenses of around $124. Between 88-90% of all prescriptions among OAA and AD eligibles were filled through private drugstores.

Nonprescription medicines were being used by 45.9% and 29.5% of the OAA and AD eligibles, respectively, at the time of the interview. Of these, 30.8% and 41.0%, respectively, had been physician-recommended. Over 64% of the OAA and 46% of the AD had chosen the nonprescription medicine on the strength of their own counsel. Though no racial differences were apparent among the OAA, more blacks were using nonprescription drugs among the AD.

Home Health Care and General Health Status

Less than 10% of the OAA and less than 3% of the AD had received any home health services during the reference period. Visiting nurse service and domestic aid were most used of these, with the latter a factor only among the elderly. Unsatisfied needs for these services were reported at less than 10% in both aid categories; the only services needed that were mentioned by more than one eligible were visiting nurse service and help in fixing meals.

Very few in either category reported current use of walkers or crutches, and only a total of three individuals in the combined sample reported unmet needs in this area.

Only two women among the AD group reported a pregnancy in the last five years. No analysis was performed.

Subjective health ratings of the eligibles are displayed in Table 6-7. Not surprisingly, very few in either assistance group report their health as excellent. On the other hand, while 40% of the AD classified their health as poor, only 15% of the elderly felt that way, p = .0000. Among the 13 OAA who said their health was poor, three each cited heart trouble, arthritis,

TABLE 6-7. SUBJECTIVE HEALTH RATINGS: TRENTON OAA AND AD ELIGIBLES

	OAA Total			OAA, 65-74			OAA, over 75			AD		
Rating	T	W	B	T	W	B	T	W	B	T	W	B
Percent												
Excellent	7.1	2.3	11.9	6.4	0.0	11.1	7.9	4.3	13.3	3.8	6.6	1.4
Good	38.8	46.5	31.0	38.3	50.0	29.6	39.5	43.5	33.3	24.2	36.1	14.1
Average	38.8	39.5	38.1	34.0	30.0	37.0	44.7	47.8	40.0	31.1	21.3	39.4
Poor	15.3	11.6	19.0	21.3	20.0	22.2	7.9	4.3	13.3	40.9	36.1	45.1

diabetes and physical incapacities as the complaint. Among the 54 AD in this category, heart trouble and poor health/often ill were both cited by ten persons and high blood pressure was reported by nine.

Only about 1% of the OAA and AD eligibles in Trenton, one person in each category, rated the family health services available to them as poor. This is a tribute both to the delivery system and the comprehensive coverage provided by the New Jersey Medicaid program.

AFDC Eligibles

Demographic Characteristics

Interview data were collected for 2,433 AFDC recipients in Trenton, and various demographic characteristics of that group are shown in Table 6-8. Almost 73% of the sample were black, and about 75% were children (under age 21). Nearly 10% of the children were less than one year old and over 30% were preschoolers (under 6). Since 74% of the children and only 70% of the adults were black, there appeared to be a slight tendency toward larger families among the blacks, a fact that is supported by the respective percentages in case sizes of three or less and four or more. Among the adults, only 6.6% were males--a statistic which is consistent with the familiar pattern of welfare family structure; the children were evenly divided by sex.

Most of the eligibles--adults as well as children--were single. Comparing the two races, 16.3% of the whites and 13.1% of the blacks were married. Overall, 36.7% of the eligibles were in cases of size three or less.

There were 348 persons--262 children (14.4%) and 86 adults (13.9%) who indicated that they had some form of additional health insurance. Three-fourths of those reporting other insurance identified it as Blue Cross, and over 70% also identified Blue Shield. Surprisingly, there was virtually no difference by race in the ownership of other insurance.

Hospital and Nursing Home Utilization

Table 6-9 shows that 25.2% of the eligibles had been hospitalized during the approximately 18-month reference period beginning January 1, 1972, for an

TABLE 6-8. SELECTED DEMOGRAPHIC CHARACTERISTICS: TRENTON AFDC ELIGIBLES*

	AFDC Total			Children			Adults		
Characteristic	T	W	B	T	W	B	T	W	B
Sex									
% male	39.4	37.7	40.0	50.5	49.3	51.0	6.6	7.6	6.2
% female	60.6	62.3	60.0	49.5	50.7	49.0	93.4	92.4	93.8
Age									
% under 1 year	6.7	3.6	7.8	8.9	5.0	10.3	0.0	0.0	0.0
% 2-5 years	17.8	18.9	17.3	23.8	26.2	22.9	0.0	0.0	0.0
% 6-20 years	50.2	49.6	50.4	67.2	68.8	66.8	0.0	0.0	0.0
% 21-44 years	22.1	23.0	21.4	0.0	0.0	0.0	87.3	82.6	89.2
% over 45 years	3.1	4.9	3.7	0.0	0.0	0.0	12.9	17.3	10.8
Education									
% none	26.6	26.2	26.7	34.9	34.4	35.1	1.9	4.9	0.7
% Grades 1-6	28.2	28.6	28.0	35.2	35.2	35.2	7.4	11.4	5.7
% Grades 7-12	41.0	42.1	40.7	26.5	28.1	25.9	83.8	78.3	86.2
% post high school	1.4	1.5	1.3	0.5	0.6	0.5	3.7	3.8	3.7
Marital status									
% married	3.6	4.5	3.3	0.1	0.0	0.1	14.1	16.3	13.1
% not married	96.3	95.2	96.8	99.8	99.6	99.9	85.9	83.3	86.8
Case size									
% 3 or less	36.7	43.2	34.2	32.5	38.2	30.5	49.0	56.3	45.9
% 4 and over	63.3	56.8	65.8	67.5	61.8	69.5	51.0	43.7	54.1
Total number of eligibles	2433 (11)	660 (1)	1773 (10)	1823 (1)	477 (0)	1346 (1)	610 (9)	183 (1)	427 (8)

*See footnotes to Table 3-8.

TABLE 6-9. UTILIZATION AND OUT-OF-POCKET EXPENSES FOR INPATIENT HOSPITAL CARE: TRENTON AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% hospitalized in 1972-73	25.2	23.3	25.9	20.2	20.5	20.1	40.3	30.6	44.5
Number of admissions per 100 eligibles in 1972-73	37.9	39.7	37.3	28.5	34.8	26.2	66.2	51.0	72.1
Mean length of stay on last admissions	8.0	7.6	8.1	7.9	6.9	8.3	8.2	8.9	7.9
Total number of in-patient days per 100 eligibles in 1972-73	303.2**	301.7**	302.1**	225.1	240.1	217.5	542.8	453.9	569.6
Out-of-pocket expense									
Percent	6.7	9.1	5.9	5.2	6.1	4.8	8.9	14.3	7.4
Mean ($)	183.80	207.30	164.70	85.50	70.00	101.00	235.50	293.10	193.60
Median ($)	75.00	55.00	80.00	107.50	30.00	116.20	75.00	237.50	75.00

*See footnotes to Table 3-9.
**Apparent discrepancy here results from rounding, with large base population.

admission rate of 37.9 per 100 eligibles. To no one's surprise, a larger percentage of adults than children were hospitalized (40.3% v. 20.2%, p = .0000), for more admissions per 100 (66.2 v. 28.5) and for a longer mean length of stay (8.2 days v. 7.9 days). The percentage of children hospitalized varied little by race, but the whites had a higher number of admissions per 100, though the blacks averaged a slightly longer length of stay (8.3 days to 6.9 days). Among the adults, a higher percentage of blacks were hospitalized (p = .0007) for more admissions per 100 (72.1 v. 51.0), but whites averaged a longer length of stay (8.9 days v. 7.9 days). In the final analysis, this meant that white children and black adults suffered more inpatient days per 100 eligibles than their counterparts. As expected, a larger percentage of children were hospitalized in cases of three or less (25.8% v. 17.5%), which is consistent with the presumption that they were a younger group.* However, more adults were hospitalized in cases of four and over (42.9% v. 37.5%), and no obvious reason existed for this. The average age of the adults in the two categories varied only by about one year.

Over 88% of the AFDC eligibles reported Medicaid as the payor for their most recent hospitalization, while only 6.4% cited other health insurance. For Medicaid, virtually no variation existed among adult/child and black/white subpopulations. As shown, 6.7% of those hospitalized encountered some out-of-pocket expenditures for their last admission, the mean value of which was $183.80. A persistently larger proportion of whites than blacks incurred these expenses--to a degree that had some statistical importance (p = .0026). For the full AFDC sample the mean outlay was higher for whites but the median was higher for blacks. Varying relationships between these measures in the different subpopulations preclude any strong inferences.

No nursing home visits were reported within the group during the reference period and only three respondents had ever used a nursing home.

Dental Care

Almost one-third of the AFDC eligibles professed regular dental visits (Table 6-10). Among the children, more whites (41.9%) than blacks (29.0%) were involved, p = .0000. Virtually no difference between the races existed for adults. This latter finding was somewhat surprising in light of the fact that proportionally more than twice as many whites as blacks had dentures and cited them as a reason for not seeing a dentist regularly. Approximately the same frequency patterns existed between the races with regard to dentist visits during 1972-73.

Case size had little or no effect on the proportion of adults who regularly saw a dentist, but among children its effect was substantial (p = .0002), with 35.1% of those in the four or more category in contrast to 26.8% in the three or less grouping regularly seeing a dentist. Again, this is largely attributable to the age distribution of children in the various case sizes.**

---

*See discussion on page 36.

**See comments on page 38.

TABLE 6-10. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR DENTAL CARE:* TRENTON AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that regularly saw a dentist	32.4	39.7	29.7	32.4	41.9	29.0	32.3	33.9	31.6
% saw dentist in 1972-73	42.9	51.5	39.7	40.8	52.6	36.6	49.4	48.7	49.6
Out-of-pocket expense for last dental visit									
Percent	3.4	5.9	2.1	2.0	4.8	0.6	6.6	9.0	5.7
Mean ($)	21.80	14.40	31.70	10.90	7.20	25.70	30.90	26.90	33.40
Median ($)	15.00	11.60	23.50	12.00	10.50	26.70	18.20	17.00	18.70
% that had an unmet dental need in 1973	7.6	7.1	7.7	3.9	2.9	4.3	18.4	18.0	18.5
% that had a current dental problem	13.2	13.5	13.1	9.8	9.4	10.0	23.4	24.0	23.2

*See footnotes to Table 3-10.

Of the 1,232 children who did not regularly see a dentist, over 52% were reported as "not sick enough," while over 30% were said to be too young. Among the 413 adults, 52% were "not sick enough," 15% had dentures and almost 14% were "afraid." The outstanding scope of coverage in New Jersey--as well as public knowledge of the benefits--is demonstrated by the fact that only 2% of the AFDC eligibles who did not regularly see a dentist blamed lack of money for this fact.

For those who had seen a dentist during the first half of 1973, the mean number of visits was 2.0. Comparing this with the 1972 figure of 1.6 for an entire year, a serious underreporting problem is again apparent.

As has become familiar elsewhere, of those who saw a dentist in 1972 or 1973, extractions were far more common among blacks than whites, especially in the adult category, $p = .0014$, where extractions were listed as the leading reason for last seeing a dentist (41.2%). Other important reasons among the adults were cavity repair (30.6%), general checkup (20.3%) and dentures (19.9%). For the children, a general checkup, not surprisingly, was the leading reason for seeing the dentist (53.8%), followed by cavity repair (37.8%) and extractions (16.8%). Cavity repair was more prevalent among white children ($p = .0084$) and, as noted above, more black children had extractions ($p = .0105$).

Medicaid was reported as the payor for the last dental visit for 86% of those who had seen a dentist since January 1972. As was true for hospital visits, a consistently larger percentage of whites than blacks incurred out-of-pocket expenses for the last visit ($p = .0007$), but of those who did incur costs, both mean and median expenditures were higher for blacks in all subpopulations. While numbers were too small to be reliable, it is interesting to note that proportionally more whites than blacks cited "didn't know Medicaid covered" and "provider

TABLE 6-11. UTILIZATION, OUT-OF-POCKET EXPENSES AND UNMET NEEDS FOR VISION CARE:* TRENTON AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that obtained glasses in 1972-73	22.4	21.5	22.7	17.6	17.2	17.7	36.7	32.8	38.4
Out-of-pocket expenses for last pair									
Percent	16.0	12.7	17.1	12.8	8.5	14.3	20.5	18.3	21.3
Mean ($)	34.70	44.40	32.00	31.90	44.30	29.00	37.00	44.50	34.70
Median ($)	32.10	45.40	29.80	30.00	46.00	27.80	34.20	45.00	32.00
% that had an unmet need for glasses in 1972- 3	5.0	3.6	5.5	2.9	2.1	3.1	11.3	7.7	12.9
% that had eye/vision care in 1972-73	31.5	28.8	32.5	27.4	26.4	27.7	43.8	35.0	47.6
Out-of-pocket expenses for eye/vision care									
Percent	8.2	9.6	7.8	7.1	8.0	6.8	10.2	13.0	9.4
Mean ($)	31.50	39.90	28.30	34.50	50.00	28.30	27.70	26.30	28.20
Median ($)	31.10	46.00	27.80	40.00	50.00	27.80	25.70	17.00	27.80
% that had unmet need for eye/vision care in 1973	3.0	2.9	3.0	1.9	1.7	1.9	6.4	6.0	6.6

*See footnote to Table 3-11.

refused to participate" as the reasons for incurring out-of-pocket costs.

Three-fourths of those who regularly saw a dentist reported doing so in a private dentist's office or a private clinic. "Other clinics" were reported by 12.4%. Among the children, 16.6% reported that they usually got their dental care through a public/parochial school program; the overwhelming majority of this group was black, p = .0000.

Among those reporting unmet needs or current dental problems, there was very little variation by race, as shown in Table 6-10, and the incidence of these problems was comparatively low. Among those who had experienced an unmet dental need in 1972-73, the most common reason for not seeing a dentist--by a considerable margin--was fear (30%).

Vision and Hearing Care

Substantially more adults (36.7%) than children (17.6%), p = .0000, had obtained glasses during 1972-73 (Table 6-11). A consistently higher percentage of blacks than whites had obtained glasses and incurred out-of-pocket expenses in doing so, but in both instances the differences were so narrow as to appear statistically insignificant. At the same time, mean and median out-of-pocket expenses were higher for whites in all subpopulations. In any case, however, over 90% of those obtaining glasses during the reference period cited Medicaid as the principal payor. In this regard racial differences were negligible, though persistently favoring the blacks. Differences by case size categories were also negligible.

Four-fifths or more of the eligibles had obtained their last pair of glasses directly from the doctor--more blacks than whites (p = .0000). About 10%--more whites than blacks (p = .0000)--obtained their spectacles from a private clinic, with 5% reporting an eyeglass company/optician as the source (again, more whites than blacks, p = .0188).

Only 5% of the AFDC eligibles reported an unmet need for glasses during 1972-73--more adults than children, p = .0000, and more blacks than whites, p = .0278. Two-thirds of this group said that the glasses they needed had been prescribed by a doctor. Lack of money and lack of transportation (12.4% each) were most frequently cited as reasons for not obtaining needed glasses, with the latter reason being mentioned only by blacks.

In both children and adult categories, a somewhat larger proportion of blacks than whites obtained eye/vision care during 1972-73 (p, pooled = .0403). Among both races, a larger proportion of adults than children had received such care, p, whites = .0145 and p, blacks = .0000. Most of the eligibles who went to the eye doctor in 1973 went either because of mechanical eye problems (65.5%) or for a checkup (19.0%). The latter category was far more important for children (p = .0001) and, among children, for whites (p =.0019). Mechanical eye problems were more frequently reported for adults (p = .0303) and blacks (p = .0434).

The private doctor's office was by far the most common source of care on the last visit (83.4%).

Only 8.2% of those who obtained eye/vision care incurred out-of-pocket expenses, proportionally more whites than blacks, though by a statistically unimportant margin. Mean and median out-of-pocket expenses were higher for whites both overall and among children, but they were higher for blacks among adults. Small numbers, however, make any conclusions based on these data tenuous.

Only 3.0% cited an unmet need for general eye/vision care--again, a tribute to the excellent coverage available in New Jersey.

Use of hearing aids was nominal among AFDC eligibles in Trenton, but most of those in use had been prescribed by a physician. All but one of the hearing aids that were obtained during the reference period were paid for by Medicaid, the exception being one that was purchased by an adult with her own money. Even in that case the respondent knew that Medicaid would have paid, but faster service was cited as the rationale for incurring out-of-pocket costs. Unmet needs for hearing aids were at a nominal level (2.4%) with less than half of those "needed" having been prescribed by a physician. Reasons for the last visit to an ear doctor varied somewhat by age and race, but overall, the three most common ones were a general hearing checkup (27%), ear infection (25.4%) and wax or obstruction of ear (12.7%). The vast majority of these visits were paid for by Medicaid. All but one of the respondents who did not collect from Medicaid reported that coverage was available but their provider refused to participate. Fortunately, their expenditures averaged under $20.

TABLE 6-12. UTILIZATION, OUT-OF-POCKET EXPENSE AND UNMET NEEDS FOR PHYSICIAN SERVICES:* TRENTON AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that saw or phoned a physician in 1973	55.9	58.2	55.1	51.7	53.5	51.0	68.7	70.5	67.9
Out-of-pocket expense									
Percent	5.4	5.6	5.4	4.1	4.2	4.0	8.4	8.1	8.6
Mean ($)	11.70	10.80	12.00	13.10	9.10	14.80	10.30	10.30	9.50
Median ($)	10.10	10.30	10.00	13.10	10.00	13.20	8.30	10.60	7.80
% that had an unmet need to see a physician in 1973	3.0	4.1	2.7	1.3	1.3	1.3	8.2	11.5	6.8

*See footnotes to Table 3-12.

Physician Services and Prescriptions

The percent of eligibles that utilized physician services during the first half of 1973 (55.9%) is shown in Table 6-12. Though no sharp racial patterns are present, substantially more adults than children, p = .0000, used these services. Case size appeared to be an important variable in determining the use of physician services, with higher levels of use in both child (p = .0000) and adult (p = .1778) categories for cases of three or less. In the case of the children, this is probably a factor of age.* It is also interesting to note that case size influenced racial patterns. In cases of three or less, more blacks than whites contacted a physician in 1973, and this held true among both children and adults. In cases of four or more, the situation was the exact reverse, with more whites than blacks contacting a physician.

Among those who saw a physician in 1973, the mean number of visits was about 3.5, broken down by 2.9 for children and 4.8 for adults.

Going back to January 1972, over 82% of the AFDC sample had either phoned or visited a physician during the reference period--82.7% of the children and 89.7% of the adults. This, coupled with the fact that 97.5% reported either that they had a regular physician or saw a physician when necessary indicates ready accessibility to primary care services on the part of the Trenton AFDC recipients. This is further substantiated by the fact that only 3% of the group reported an unmet need to see a physician during 1973 (more adults than children, and among adults, more whites than blacks).

Twenty-four percent of those who had seen or phoned a physician in 1973 reported having a chronic condition, with the proportion for adults (44.9%) much higher than that for children (14.8%), p = .0000. For the total group, a higher proportion of whites than blacks reported chronic problems, a situation that was especially pronounced among adults (54.3% v. 40.7%, p = .0049). The most often reported chronic conditions among children were bronchitis (19.4%), upper respiratory infections (14.4%) and coronary artery disease (10.1%). In order, these problems were more common for blacks, whites and whites among the children. For adults, the most frequently identified chronic disorders were bronchitis (12.8%), coronary artery disease (12.8%), hypertension (11.2%) and anxiety/nervous disorders (10.6%). In all of these except bronchitis, proportionately more blacks were involved. Nearly 35% of those with chronic conditions reported that they usually receive an injection when they visit the doctor; over 82% reported that they usually received a prescription, under 8% got free samples and less than 1% were advised to use some nonprescription medicine. The only substantial racial pattern discernible here was the consistently more whites than blacks received prescriptions. For those with nonchronic conditions, the percentage who received an injection on their last visit fell to 27.8%; 52% received prescriptions, about 6% got free sample medications and just over 1% were referred to a nonprescription medicine.

---

*See page 42.

Medicaid paid for 87.3% of the combined chronic and nonchronic eligibles who had visited a physician during 1973. Only 5.4% had incurred out-of-pocket expenses, and while this figure was higher for adults than for children (p = .0006), no consistent racial pattern emerged and mean expenditures were less than $12.

An examination of the utilization patterns for Trenton reveals that 83% of the chronic eligibles and over 69% of the nonchronic obtained their ambulatory care through private physicians; 8.3% and 13.3% of these groups, respectively, usually sought their treatment through a hospital emergency room or clinic. Significant differences by race appeared only among the nonchronic emergency room users, which were dominated by blacks (p = .0139).

Among those who did not see a physician when needed, the two most frequently cited reasons were "lack of transportation" and "not sick enough" but these constituted only a minute subset of the entire AFDC sample. Note that of those who paid out-of-pocket costs, most reported that it was because the provider refused to participate in Medicaid.

Nearly 89% of the AFDC eligibles claimed to have had a routine medical checkup since January 1, 1972--more adults than children and more blacks than whites. This number is probably somewhat overstated (see p. 32).

As noted in Table 6-13, about 90% of all those AFDC eligibles who were issued a prescription in 1973 were able to fill and refill their prescriptions as needed. Though there was little difference between adults and children in this regard, there was great disparity between blacks and whites, the latter reporting a considerably lower percentage of prescriptions filled/refilled as needed, p = .0005. The most frequently cited reason for not filling/refilling prescriptions as needed was "not sick enough" (25.5%), an answer that was voiced far more frequently by whites than blacks, p = .0000. In fact, to a significant degree, this self-selected (or self-diagnosed) reason for not filling prescriptions accounts for a good deal of the difference between whites and blacks in filling/refilling prescriptions as needed.

Over 95% of all prescriptions were paid for by Medicaid. Among the 4.5% who incurred out-of-pocket expenses there was a persistent, though narrow, margin reflecting a greater proportion of whites than blacks with out-of-pocket expenses (p = .0499); the magnitude of their expenses was also marginally higher in all subpopulations.

TABLE 6-13. ISSUANCE, OUT OF POCKET EXPENSES AND FILLING OF PRESCRIPTIONS:* TRENTON AFDC ELIGIBLES

	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
% that received a prescription in 1973	40.8	43.3	39.9	35.2	36.1	34.8	57.7	62.3	55.7
% of eligibles that failed to fill or refill as needed	10.7	15.7	8.6	10.6	15.1	9.0	10.8	16.7	8.0
Out-of-pocket expense for prescriptions									
Percent	4.5	5.8	4.0	3.1	4.7	2.6	7.7	8.1	7.6
Mean ($)	11.70	12.40	11.30	10.30	10.90	9.90	12.90	14.20	12.30
Median ($)	6.80	6.00	7.10	5.60	4.70	6.00	8.50	7.70	8.90

*See footnotes to Table 3-13.

Over 95% of all prescriptions used by AFDC eligibles in Trenton were filled through drug stores, with little difference by race or age classification.

Nearly 60% of the eligibles were currently using some nonprescription medicine(s)--51.7% of the whites and 59.1% of the blacks (p = .0005). Of these, about 14% said that the medicine was recommended by a physician, while 48.4% (62.1%, children) had had the medicine recommended by a friend or relative and 40.0% (78.7%, adult) had chosen the medicine themselves. The mean expense for these medications during the final half of 1973 was less than $14.

Home Health Care, Family Growth and Planning, and General Health Status

Use of home health services was not particularly widespread in Trenton, where 5.4% of the AFDC sample had utilized one or more of these services. Use was higher among blacks than whites (p = .1045). Again, visiting nurse service was the most common home health service utilized. Only 2% of the sample reported an unmet need for home health services.

Only 1.4% had recently used a walker/crutches, and less than 1% reported an unmet need for either of these devices.

Nearly half (48%) of the female eligibles between the ages of 13 and 50 had been pregnant at least onece during the last five years--41.7% of the whites and 50.4% of the blacks, p = .0134. Of the female children between 13 and 21, 27.6% had been pregnant during this period--11.4% of the whites and 33.7% of the blacks, p = .0002. Case size was an important variable in this regard. In cases of four or more, only 18.6% of the female children had been pregnant, whereas in cases of three or less, 42.5% of the girls between 13 and 21 had been pregnant. This does not seem to be age-related, since there was only an eight year range among the children and the reference period was five years. Male-female ratios among children in these two groupings are also similar. A possible explanation for this surprisingly large variation was presented on page 91.

TABLE 6-14. SUBJECTIVE HEALTH RATINGS: TRENTON AFDC ELIGIBLES

Rating	AFDC Total			Children			Adults		
	T	W	B	T	W	B	T	W	B
Percent									
Excellent	13.2	18.6	11.1	14.6	20.3	12.6	8.7	14.2	6.3
Good	63.3	59.7	64.6	68.2	65.4	69.2	48.4	44.8	49.9
Average	18.2	16.1	19.0	14.6	11.5	15.7	29.0	27.9	29.5
Poor	5.1	5.5	5.0	2.2	2.5	2.1	13.8	13.1	14.1

Of the females who had given birth within the previous five years, almost 99% reported that their last baby had been delivered by a physician. About 57% of the mothers had regularly visited a physician during their first trimester, a figure that rose to 93% during the last trimester; over 80% obtained regular neonatal care. Only in this latter category was there a major difference by race, with more blacks than whites (p = .1004) getting neonatal care.

Less than 12% of those pregnant in the last five years reported that their last pregnancy did not result in a live birth, and over three-fifths of these indicated a miscarriage.

Less than 12% (18% of the "child-mothers") of those pregnant during the last five years planned to have more children. Just over 50% of all women between the ages of 13 and 50 had received professional birth control advice, but this included only 28% of the young girls from 13-20. The most frequent source of this information was a planned parenthood organization (50.7%), followed by private physicians (32.4%). Blacks tended to rely upon the former (p = .0057), whites upon the latter (p = .0001). Less than 19% had incurred a charge for this information, and Medicaid paid in over 58% of those cases. Just over 1% of the women in the sample reported an unmet need for birth control advice.

The subjective health ratings of Trenton AFDC eligibles are shown in Table 6-14. As noted, "poor" was reported about six times as often by adults as by children, p = .0000. No consistent racial differential was present.

The health services available to these eligibles were generally thought to be quite good. It was found that 89.3% of the eligibles rated the services available as either good or excellent. Only 1.6% rated the services as poor, the most frequent complaint in this regard being that treatment was undignified. This objection was cited by 14 persons, 0.6% of the eligibles surveyed.

When asked what additional medical services were desired, the most frequent answers were: (1) more personal care/respect (65 people); (2) broader choice of physician (63 people). In contrast, 1,738 (71.4%) said no additional services were needed, and an additional 288 (11.8%) said they "didn't know" what else was necessary. Less than 3% cited prescription/nonprescription medicines (2.4%); dental care services (1.9%), and visual care services (0.3%) in this regard, thereby providing further evidence to the high degree of familiarity with the program's benefits. Clearly, AFDC eligibles in Trenton were well satisfied with the health care delivery system available to them.

CHAPTER 7

INTERCITY COMPARISONS

Introduction

The preceding four chapters have been addressed to a detailed analysis, by site and welfare category, of virtually all of the issues set forth in the original objectives of the study, including the extent and type of services used by Medicaid eligibles, the source of the services and the source of payment for the services, and the relationship between unmet needs and programmatic coverage. In addition, the self-evaluation of health status by the Medicaid eligibles has been reported for each of the four cities.

In this chapter, differences in the health care patterns of Medicaid eligibles in the four survey sites will be analyzed. As was noted earlier, the survey locations were specifically selected by virtue of the fact that their respective optional service benefit packages were different. Particular attention will be directed to the extent to which, if any, these differences influence the health behavior/status of Medicaid eligibles. This is a matter of considerable importance, with potential policy implications not only for possible modifications in the Medicaid program, but also in the broader arena of debate over a national health insurance program.

As the study began, a great deal of interest centered on the possible "utilization effects" of various optional service packages. It was thought that failure by a program to cover certain optional services might, in fact, motivate either eligibles or providers to attempt to facilitate treatment via one of the mandatory services. For example, in a situation in which it would be possible to treat an individual as an outpatient through the use of prescription drugs, failure to provide this coverage could, theoretically, be overcome via hospitalization, during which all costs are usually covered as a mandatory benefit. This result, more than likely, would lead to unnecessarily high program costs.

Alternatively, some providers might be inclined to recommend something less than optimum treatment through the use of less effective and less expensive nonprescription medicines, which would be more likely to be obtained by the patient in the absence of program coverage. This result would be subject to attack on grounds of inferior quality care; furthermore, it is possible that long-run costs would also increase under such circumstances, since ineffective care in the short run could lead to a need for more intensive and expensive care later on. Interestingly, the data provide relatively little evidence of either of these substitutions, as will be shown.

At the other extreme, it was possible that the more complete the benefit package, the more program eligibles would use all services, both mandatory and optional. This effect, if present, would parallel the old claim that supply creates its own demand; or, as more frequently stated in the medical world, "a hospital bed available is a bed used." Indeed, the data do hint that Trenton, with the most generous benefit package of the sites studied, does have consistently higher use of most services. This could, other things being equal, lead to the politically and socially explosive conclusion that only a very limited package of benefits is really needed. In this case, however, policymakers must be extremely cautious in reaching conclusions.

There are those who would automatically argue that "more is better" with respect to health care services, but this is not necessarily true. Furthermore, financial and other constraints often require that priorities be set and choices made at some point short of total coverage. One test might be an actual measurement of the health status of eligibles in fully covered vs. partially covered locations. If clear distinctions could be documented, decisions could be simplified. However, this kind of measurement--at least on a scientific level--is beyond the scope of this study, and, in any case, the entire Medicaid program is probably too new to permit any definitive conclusions on this matter. Health status at any given point in time is influenced by a plethora of variables--many of them operative over long periods of years--so care is required in drawing conclusions. Nevertheless, despite the obvious limitations, all of which will not be enumerated, the data do give some interesting results on the matter of health status as perceived by the program eligibles themselves.

In a number of the intersite comparisons there were disparities in use even between services which were covered equally in both locations. This led to suspicions among the project team that some of these differences might be explained in large part by procedural and attitudinal differences between sites in the administration of the Medicaid program. These suspicions were not supported, however, by information gained as a result of site visits and conversations with program administrators by members of the project staff, as will be explained below. In addition, these visits produced some insights on the availability of certain services through programs or institutions not part of Medicaid. The role of Grady Hospital in Atlanta is one such example. Other possible explanations for these intersite variations include differences in local medical practice, regional differences in medical "fashion," disparities in educational levels, and so on. Where appropriate, comments based on these subjective impressions will be found in the following analysis.

Overall Demographic Characteristics

In making intersite comparisons, it is important to at least recognize the potential for distortion that might exist in the case of important demographic variations in the compared populations. In Tables 7-1, 7-7 and 7-13, which appear at the beginning of the AD, OAA and AFDC discussions, respectively, some potentially important health-related demographic characteristics are identified. It can be seen that substantial intersite differences exist in the racial proportions of the respective welfare categories. This led to the decision to separately display the intersite data by race in order to minimize any distortion that might exist solely as the result of this variable. At the other extreme, the tables show that, within each aid category, intersite composition of the samples is very nearly the same when broken down by sex, thus obviating the need to discuss this factor as an explanation for intersite differences.

Basically, the desire was to attempt to control for intervening or disturbing variables so that insofar as possible, the impact of programmatic coverage could be isolated, since this was the primary objective of the investigation. The literature abounds with evidence that utilization rates are strongly associated with many demographic and socioeconomic variables. In addition to race and sex, already mentioned, income, education, age, third party coverage, urban-rural status and family size also seem to be important.

In the present study, the income and urban-rural variables were considered to be adequately controlled by the definition of the subject population (i.e., the categorically needy) and the selection of survey sites (i.e., four metropolitan areas). Remaining differences with respect to income, resulting from state by state variation in the definition of poverty, were considered inconsequential, especially in light of the questionable reliability that could be expected from any survey-reported income data. While it was realized that the urban-rural mix varied slightly among the sites survey (e.g., Fulton County, Georgia-Atlanta, and Pulaski County, Arkansas-Little Rock), this was not deemed to be a matter of major concern, since all of the areas were overwhelmingly urban.

In the AD and AFDC samples, intersite variations in the proportions of eligibles in the broad age categories of over/under 45 and child/adult, respectively, did not vary greatly. Among the OAA, some fairly sharp differences existed in the proportions who were over/under 75. Because of the large numbers involved and the clearly disparate health care patterns of children and adults, the following analysis does make this age distinction in discussing the AFDC program. For the other two categories, no age breakout was accomplished at this time. Time and money limitations as well as frequently small cell-sizes contributed to this decision.

Other variables that are not specifically controlled for in the intersite analysis include education and family size/living arrangement. A cursory review of the demographic tables that were presented in Chapters 3-6 suggests that, within specific aid categories, educational differences are not generally great between cities. The same can be said with respect to family size/living arrangement as they relate to the AD and AFDC samples. Some sharp variations in living arrangement did exist among the OAA, and, as will be mentioned below, a test was run on how this influenced physician use. The findings suggest that further analysis of this variable is warranted. Once again, however, time and money constraints militated against such analysis for the purpose of this report.

Naturally, there is every intention to continue to work with the rich database generated by this survey even after the completion of this "final report."

In this chapter, the intersite variations in health care patterns will be compared separately for each of the three categorical welfare groups included in the study.

AD Intersite Comparisons

Demographic Characteristics

In comparing the four separate site surveys for AD recipients, it was found that the proportions of males and females varied only slightly--within a range of four percentage points--with females outnumbering males by just under two to one in all locations. (See Table 7-1 for AD demographic indicators.) The most pronounced differences between the sites existed in the racial mix, ranging from the Atlanta sample, which was over 72% black to the Oklahoma City sample, which was about 79% white. Little Rock and Trenton were almost evenly divided, with roughly 51% and 54%, respectively, black. With respect to living arrangements, the interviewees were roughly evenly divided between those who lived alone and those who were in multiple-person households except in Atlanta, where the division was about 40-60%. When the sample group was divided into those age 44 and under and those 45 and over, it was found that the bulk of the AD recipients fell in the older category--ranging from a low of 66% in Trenton to a high of 74% in Atlanta.

Hospitalization

Although the provision of hospitalization benefits was mandatory in all four cities, significant differences were observed in the proportion of all AD eligibles who were hospitalized during 1972-73 ($p = .0482$) and in the total number of days hospitalized ($p = .0690$). (See Table 7-2.) Interestingly, the highest proportion of hospitalized eligibles existed in Trenton (46.2%), the city with the most complete overall benefit package. Oklahoma City (43.6%) and Atlanta (42.3%) were only slightly behind, but Little Rock lagged sharply, with only 29% of its Medicaid eligibles reporting an incident of hospitalization during the reference period. When broken into subpopulations, no significant differences existed between the cities among the white eligibles nor those under 45 years of age. Among those 45 years old or over ($p = .0119$) and among the blacks ($p = .0056$), however, differences were substantial; in the former instance, the differences almost exactly paralleled those for the total AD sample with respect to the proportion hospitalized during the period, but among the black AD recipients there was much wider variation.

One might have approached these intersite comparisons with one of two basic hypotheses. The first, or substitution hypothesis, would have predicted higher levels of hospitalization in both Little Rock and Oklahoma City, since neither city's Medicaid program provided coverage for prescriptions. Under this hypothesis it would have been suggested that failure to provide prescription benefits could lead patients and providers to scheme to "beat the system" by obtaining the necessary medications under the umbrella of a mandatory benefit. Clearly, the evidence provides no support for this hypothesis. It must, of course, be remembered that hospitalization rates are a function of many variables; thus, there exists at least a possibility that some substitution did in fact take place, but that it was masked/offset by one or a combination of other variables.

TABLE 7-1. INTERSITE COMPARISON OF SELECTED DEMOGRAPHIC VARIABLES (PERCENTAGES)--AD*

Characteristic	Atlanta	Little Rock	Oklahoma City	Trenton
Race				
White	27.9	49.0	78.7*	46.2
Black	72.1	51.0	18.9*	53.8
Age				
44 or less	26.1	32.1	28.6	33.8
45 or more	73.9	67.9	71.4	66.2
Sex				
Male	34.2	36.8	33.5	37.5
Female	65.8	63.2	66.5	62.5
Total number of persons	111	102	164	132

*These totals do not equal 100 because of the omission of a small group of American Indians--found only in Oklahoma City--from the intersite comparisons.

On the other hand, there does seem to be some mild support for an alternative view which suggests that the more benefits are made available, the more health conscious the beneficiaries become, thus leading to higher use of all services.

In fact, the most curious observation is the wide disparity (14.6%) between the proportions hospitalized in Little Rock and Oklahoma City, neither of which provided coverage for prescriptions. This may, at least in part, be influenced by the very different racial patterns between these two cities (Table 7-1), but this does not explain the full difference; the rate is approximately 7% higher for blacks and 14% higher for whites in Oklahoma City. It was initially thought that the large difference between Little Rock and Oklahoma City might be attributable to variations in the operational procedures, especially the "marketing" efforts, of the two plans. This did not hold up under scrutiny, though. It was found that in both locations every categorical welfare recipient receives a monthly notice of Medicaid eligibility, along with a list of the available benefits, on his/her welfare check stub. In addition, Little Rock distributes a pamphlet on benefits to all the categorically needy when they first become eligible. In Atlanta, a brochure on benefits is sent to everyone when they initially become eligible for Medicaid. Trenton also provided, via the check stub, monthly notice of eligibility. In addition, general information pamphlets were supplied to local and county welfare offices, though no systematic distribution pattern existed. Thus, no readily discernible explanation exists in the survey data for the wide disparity in the percentage of welfare eligibles who had been hospitalized during the reference period in Little Rock and Oklahoma City. Instead, it appears that the presurvey site study may hold the explanation. There, it may be recalled, it was reported that the major hard core poverty area, the "East End" of Little Rock, suffered from an acute shortage of providers. All of the major hospitals were located in the western half of the city, and there were few, if any, private

TABLE 7-2. INTERSITE COMPARISONS OF HOSPITAL AND DENTAL USE (PERCENTAGES)--AD*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Hospitalized in 1972-73				
Total	42.3	29.0	43.6	46.2
White	35.5	32.7	46.5	34.0
Black	45.0	25.5	32.3	55.7
Regularly saw dentist				
Total	8.2	16.8	9.8	17.6
White	9.7	16.0	10.2	16.7
Black	7.6	17.6	9.7	17.1
Not seeing dentist regularly who cited lack of money as reason				
Total	15.7	19.0	26.0	4.6
White	17.9	28.6	26.5	4.4
Black	14.9	9.5	28.6	5.2
Saw dentist during 1972-73				
Total	35.2	28.3	23.9	36.4
White	31.0	25.0	20.6	24.1
Black	36.7	31.4	35.7	47.1
With out-of-pocket expense for last dental visit				
Total	25.7	37.0	56.8	4.4
White	28.6	54.5	53.8	0.0
Black	25.0	25.0	77.8	6.7
Unsatisfied need to see dentist				
Total	30.6	33.7	40.9	18.7
White	35.5	34.7	39.8	14.8
Black	28.7	32.7	41.9	32.9
Citing lack of money as reason for not seeing dentist for unmet need				
Total	52.9	75.0	71.9	13.3
White	45.5	70.6	77.1	37.5
Black	56.5	80.0	61.5	4.5

*In the intracity comparisons that were explored in Chapters 3-6, all eligibles whose race was recorded as "other" by the interviewers were lumped in with the "white." The rationale was that the primary interest was to measure how, if at all, blacks (and American Indians in Oklahoma City) differed from the rest of the poor in their health care activities and that the other racial minorities were too small to permit any reasonable separate treatment. The same procedure is reflected in Tables 7.1, 7.7 and 7.13. All other tables from 7.2 through 7.19, however, show intercity racial comparisons with the "others" removed from the "white" category. The purpose was to achieve more uniform intercity comparisons. The main impact of this adjustment was noted in Trenton, the only site studied with a sizable Spanish-speaking group of eligibles, and to a lesser extent, in Oklahoma City, where some mixed blood Indians were recorded as "other." Because of these exclusions, there are several isolated instances in which the proportion shown in the "total" rows of the tables will exceed the weighted average of the "white" and "black" subsets.

physicians in this blighted area. In addition, public transportation was alleged to be very poor (p. 48, above). In a word, then, inaccessibility to hospital services is probably the most important causal variable in the use pattern between cities. The potential policy implications of this are discussed below.

Dental Care

Among those who reported that they regularly saw a dentist, there again were substantial differences (p = .0559) between the cities, and these differences followed the expected pattern. (Table 7-2 contains all dental comparisons.) Thus, when Trenton and Little Rock (both covered dental care) were arrayed against Atlanta and Oklahoma City (neither covered dental care), the difference was even more pronounced, p = .0097. In this case, intersite differences seemed slightly greater among those under 45 and among blacks than in the other subpopulations.

For those who did not see a dentist regularly, the proportions citing lack of money as a barrier provide some interesting comparisons. Note that despite the fact that both cities provide dental benefits, the percentage who cited money as a barrier was only about one-fourth as high in Trenton as it was in Little Rock. Again, a simple-minded hypothesis would suggest that Medicaid eligibles in Little Rock were less well informed about their benefits than their counterparts in the other survey sites, but, as has been noted above, this would be inconsistent with the standard procedures which were reported to the project team. It is likely that the maldistribution of hospitals and other health care providers--few being located in the poorest sections of Little Rock--plus a marginal public transportation system, were again major factors. Another possible explanation could relate to different attitudes and practices with respect to the preauthorization requirements which existed in both cities. The apparently anomalous fact that, of those who did not have a regular dental pattern, proportionally fewer eligibles viewed money as a barrier in Atlanta than in Little Rock, despite the fact that Georgia Medicaid did not cover dental care, is most likely a reflection of the activities of the many extra-Medicaid agencies providing free dental care in Atlanta, notably the Benjamin Massell Clinic and Grady Hospital.

Among those who cited the use of dentures as the reason for not seeing a dentist regularly, the expected pattern emerged, with the highest proportion in this category existing in Trenton and Little Rock--the two cities with programmatic coverage for dental care. Moreover, this reason was cited least frequently in Atlanta, a finding which suggests that the various voluntary dental care agencies in that city tend to avoid the very expensive option of providing dentures. Though surprising on the surface, the fact that Oklahoma City had proportionately more persons citing dentures than Atlanta--despite the fact that Oklahoma City lacked any significant voluntary programs to substitute for Medicaid--was consistent with the racial patterns of denture use that were reported in Chapters 3-6. There it was found that more whites than blacks in all categorical assistance subpopulations used dentures; referring again to Table 7-1, it is seen that Oklahoma City had by far the smallest proportion of black AD recipients.

There were substantial differences between the cities in the proportion of eligibles who had seen a dentist during the period covered by the survey (since January 1972), p = .0800. The pattern, however, does not follow what would be predicted on the basis of Medicaid coverage. Instead, Atlanta, with no coverage, ranks second, only slightly behind Trenton, while Little Rock, with full coverage, is a distant third, far behind Atlanta and only slightly ahead of Oklahoma City. This finding suggests that the many voluntary dental agencies in Atlanta probably account for a rather significant volume of visits, despite the claim by Medicaid officials that these supplemental programs, taken collectively, were grossly inadequate in magnitude. The problem in Little Rock, again, was more one of accessibility than availability.

The proportions of eligibles who encountered out-of-pocket expenses for their last dental visit also varied significantly between cities, with the now familiar pattern of better performance (i.e., fewer with out-of-pocket expenses) in Atlanta than Little Rock again holding true. A mildly puzzling outcome arose in the racial breakdown of this question. An identical percentage of blacks in Atlanta and Little Rock (2.5%) incurred direct costs for their last dental visit, but there was a wide disparity among whites (Atlanta = 28.6%; Little Rock = 54.5%). Cell size, however, was so small that these estimators may not be reliable.

Atlanta AD recipients also seemed to be doing slightly better than their Little Rock counterparts with reference to unmet dental needs, and fewer of them cited lack of money as the cause. This was predictable, in light of the above discussion. Otherwise, the pattern was largely as expected, in light of Medicaid program benefits. Trenton had the lowest and Oklahoma City the highest levels of unmet dental needs.

Eye/Vision Care

As is clear from Table 7-3, programmatic benefits for the purchase of glasses significantly influenced the behavior of Medicaid eligibles in the various sites. Trenton was the only location studied which provided full coverage for glasses, while the other three sites had little, if any, adult coverage. As expected, relatively more Trenton eligibles--by a margin of about two-to-one--obtained glasses during the reference period than was true in the other locations. Furthermore, a much smaller proportion of Trenton eligibles (6.9%) than of the combined total in the other three sites (79.2%) incurred direct costs for their glasses, p = .0000. By the same token--and by nearly the same margin--Trenton had the smallest proportion of eligibles with an unmet need for glasses (p = .0000) and the lowest proportion of those citing money as a reason for an unmet need (p = .0000).

In all four cities, proportionally more whites than blacks obtained glasses, but the racial difference was nominal in Trenton and Oklahoma City. In the other two cities a sharper contrast was apparent with proportionally twice as many whites as blacks obtaining glasses in Little Rock. Even within

TABLE 7-3. INTERSITE COMPARISONS OF EYE/VISION CARE (PERCENTAGES)--AD*

Care	Atlanta	Little Rock	Oklahoma City	Trenton
Obtained glasses after 1/1/72				
Total	22.5	16.7	22.0	44.7
White	29.0	22.0	22.7	46.3
Black	20.0	11.5	19.4	45.1
Obtained glasses that incurred out-of-pocket expenses for them				
Total	76.0	70.6	85.7	6.1
White	55.6	63.6	85.7	4.0
Black	87.5	83.3	83.3	9.7
With unmet need for glasses				
Total	47.7	38.4	42.5	13.0
White	53.6	40.0	42.4	9.3
Black	45.6	36.7	50.0	17.1
Unmet need for glasses who cited lack of money as reason				
Total	63.3	86.5	92.2	29.4
White	73.3	89.5	94.0	60.0
Black	58.8	83.3	85.7	16.7
Last visited eye doctor in 1972-73				
Total	36.7	27.7	24.8	46.1
White	29.0	32.0	24.6	40.4
Black	39.7	23.5	26.7	52.2
Unsatisfied need to see eye doctor				
Total	40.5	32.7	41.1	13.7
White	45.2	38.0	42.5	9.3
Black	38.7	27.5	38.7	18.6
Unmet need to see eye doctor who cited lack of money as reason				
Total	55.8	96.9	92.3	26.7
White	71.4	94.4	92.3	60.0
Black	48.3	100.0	91.7	10.0

*See footnote to Table 7.2

similar racial groups, however, intercity differences were obvious. There were also very clear differences between the proportion of those under 45 and those 45 and over who obtained glasses, with the latter group reflecting a predictably higher need for glasses. Again, intercity p-values strongly suggested basic differences in the populations observed.

There were very strong differences between the cities in the proportion of eligibles who had seen an eye doctor during 1972-73 (p = .0009), and the pattern was highly predictable for the total AD group. Trenton, with full coverage, had the highest use; Atlanta, with no coverage but many voluntary agencies, was second in utilization; Little Rock and Oklahoma City, with neither coverage nor any outstanding voluntary agencies, were both at a similarly low level of utilization--approximately 25%.

The intercity relationships remained about the same (p = .0070) when only AD blacks were considered, except that Little Rock and Oklahoma City changed rankings--still within three percentage points of each other. Among white AD recipients, however, intercity differences in the proportions that had seen an eye doctor during the recall period narrowed markedly (p = .2086). The change was most remarkable in Little Rock, which was the only one of the sites in which more whites (32%) than blacks (23.5%) used this service. Racial differences were also large (10-12% in Atlanta and Trenton, but in both cases more blacks utilized vision care services.

Unsatisfied needs to see an eye doctor were, in the age breakout, concentrated almost entirely among those over 45 years of age. In racial terms, a larger proportion of whites had unsatisfied needs in all locations except Trenton, with the margin ranging from about 5% in Oklahoma City to 7% in Atlanta and 10% in Little Rock. In Trenton, 18.6% of the blacks vs. only 9.3% of the whites reported unmet needs. The available data provide no clear explanation for these variations, but it could be that blacks in the three sites with no coverage had greater access to supplemental, non-Medicaid programs, e.g., Grady Hospital in Atlanta, whereas whites in Trenton, with coverage, had better access to private doctors' offices.

Physician Visits

Differences between sites in the proportion of eligibles without chronic conditions who had seen or phoned a physician during 1973 were modest enough to suggest that, for this mandatory benefit, sampling error could easily be the major variable, although Trenton did, as for almost every other service studied, show the highest utilization rate. (Table 7-4 displays the data for this section.) When Trenton and Atlanta, the two locations with prescription coverage, were balanced against Little Rock and Oklahoma City, however, there was no indication of a substitution effect (i.e., office visit for prescription) at work among either those with or without chronic conditions. In racial terms, little difference existed in intercity comparisons between Little Rock and Trenton for those without chronic conditions; in Atlanta, however, while 50% of the blacks had contacted a physician, only 20% of the whites had. In Oklahoma City, the proportions were 33.3% black and 51.4% white. Interestingly, in both cities the higher level of use existed in the racial group that strongly dominated the AD welfare category. This may simply reflect a somewhat natural tendency of the local Medicaid agency to focus its efforts on its primary "client" group or, again, simply the differential accessibility to services based on racial housing patterns.

TABLE 7-4. INTERSITE COMPARISONS OF PHYSICIAN USE (PERCENTAGES)--AD*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles without chronic conditions who had physician contact in 1973				
Total	40.6	31.3	46.7	52.8
White	20.0	32.0	51.4	50.0
Black	50.0	30.4	33.3	59.1
Chronic patients who usually received injections during an office visit				
Total	28.6	35.3	34.8	35.9
White	28.6	36.0	39.6	38.5
Black	28.6	34.6	23.1	37.5
Chronic patients who usually received a prescription during an office visit				
Total	93.3	95.5	86.0	97.4
White	85.0	100.0	88.1	100.0
Black	96.4	91.7	83.3	95.8
Chronic patients who usually received free sample of medicine during an office visit				
Total	14.3	6.0	21.7	3.8
White	19.0	0.0	20.8	3.8
Black	12.5	11.5	23.1	4.1
Chronic patients who usually incurred out-of-pocket costs for an office visit				
Total	6.9	25.5	13.4	5.1
White	15.0	20.0	15.4	3.8
Black	3.8	30.8	7.7	6.3
Eligibles with a regular group of doctors				
Total	47.7	71.7	76.8	76.3
White	51.6	75.0	78.9	71.7
Black	46.2	68.5	67.7	77.5
Unsatisfied medical need after 1/1/73				
Total	34.5	19.8	31.3	12.3
White	41.9	18.4	31.5	9.4
Black	31.6	21.2	35.5	15.7
Unmet medical need who cited lack of money as reason for not seeing the doctor				
Total	29.7	45.0	39.5	0.0
White	46.2	55.6	36.8	0.0
Black	20.8	36.4	50.0	0.0

*See footnote to Table 7.2.

Among the younger (under 45) AD eligibles there were significant (p = .0019) differences between the cities in the proportions with physician contact for nonchronic conditions during 1973. Among those over 45, the intercity differences were less pronounced (p = .1164). The most surprising fact was that, across all four cities, a substantially higher percentage of those under 45 (56.5%) than of those 45 and over (36.2%) had made physician contact in the first half of 1973. Only in Atlanta did the a priori prediction of higher use by the older eligibles hold true--11.1% of those under 45 and 52.2% of those 45 and over. In Little Rock, Oklahoma City and Trenton the respective proportions of those under 45 who had a physician contact for a nonchronic condition were 42.9%, 60.0% and 80.0%, respectively; among those 45 and over, the corresponding percentages were 22.2%, 40.0% and 28.6%. Unfortunately, the survey data simply do not provide a reasonable explanation for these unexpected discrepancies.

The general inaccessibility of medical services to AD Medicaid eligibles in Little Rock seemed to be even further substantiated by the reported frequency of physician visits during 1973. Of those without chronic conditions who saw a physician at all during 1973, 66.7% in Little Rock saw the doctor only once. The comparable figures in the other cities were, respectively: Atlanta, 23.1%; Oklahoma City, 40.5%; Trenton, 39.3%. In other words, multiple physician visits were substantially more common in these other three cities--especially in Atlanta, where the heavy use of Grady Hospital probably was a most significant factor.

In an effort to detect any evidence of the substitution effect, the proportions of those seeing a physician for chronic conditions who usually received injections, prescriptions and/or free medicine samples during office visits were compared. As can be seen, there was no pattern that was consistent as between those cities which provided the optional benefit of prescription coverage (Atlanta and Trenton) and those that did not. Though there is a possible inference of a mild substitution effect with reference to the dispensation of free medicine samples in Oklahoma City, the data suggest that the substitution is more likely one of free samples for prescriptions than of medicine in lieu of office visits.

Despite the fact that physician visits were a mandatory benefit, there was a substantial difference (p = .0022) between survey sites in the proportion of chronic patients who usually incurred out-of-pocket expenses for physician visits. Little Rock had the worst record in this regard by a wide margin.

The proportion of AD recipients with a regular group of doctors was fairly similar (71-77%) in all three of the locations, but less than half (47.7%) in Atlanta. Again, this is apparently the result of the very heavy use of Grady Hospital as a source of primary care.

The proportions of eligibles reporting unmet medical needs seemed to be largely unrelated to the availability of prescription coverage, though the intercity differences were significant (p = .0001). While Little Rock trailed only Trenton in holding down the proportion of eligibles with unmet medical needs, it had the largest percentage of those with unmet needs who cited money as a barrier to care.

TABLE 7-5. INTERSITE COMPARISONS OF PRESCRIPTIONS (PERCENTAGES)--AD*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles with chronic conditions who received new prescriptions after 1/1/73				
Total	67.1	53.1	68.1	75.3
White	66.7	52.0	69.8	80.8
Black	67.3	54.3	61.5	72.3
Eligibles with chronic conditions who filled all new prescriptions				
Total	94.0	96.2	83.0	96.5
White	85.7	100.0	83.8	95.2
Black	97.2	92.3	75.0	97.0
Eligibles without chronic conditions who received new prescriptions after 1/1/73				
Total	58.3	73.3	55.6	76.9
White	50.0	87.5	56.3	76.9
Black	60.0	57.1	50.0	75.0
Eligibles without chronic conditions who filled all new prescriptions				
Total	100.0	100.0	95.0	95.0
White	100.0	100.0	94.4	90.0
Black	100.0	100.0	100.0	100.0
All eligibles with new prescriptions who had out-of-pocket expense				
Total	34.0	85.2	91.0	3.4
White	53.6	88.6	91.9	6.3
Black	26.7	81.8	92.6	1.6
All eligibles using nonprescription medicines who were doing so on the recommendation of a physician				
Total	19.6	10.9	23.4	42.1
White	29.4	18.2	20.9	40.0
Black	13.8	3.2	40.0	44.4

*See footnote to Table 7.2.

Prescriptions

Table 7-5 displays some intercity statistics relating to prescriptions. Note that while Trenton--which does provide prescription coverage--had the highest proportion of eligibles receiving new prescriptions for both chronic and nonchronic conditions, Atlanta--which also had prescription coverage--was third in both categories; Little Rock (nonchronic) and Oklahoma City (chronic) alternated in the runnerup position. In the absence of any consistent pattern--and none was discernible either in the case of racial or age breakouts--it seems reasonable to attribute these differences to variations in local medical practice.

As can be seen from Table 7-5, virtually all prescriptions were filled as needed for both chronic and nonchronic patients. In the latter group, the absolute numbers involved were very small--only one patient each in Oklahoma City and Trenton were unable to fill their prescriptions. Among the larger group of chronically ill patients, it was surprising to find such a high proportion in Little Rock (no Medicaid coverage) successfully filling prescriptions. It was also somewhat surprising to find Oklahoma City's record so poor, for despite the fact that Oklahoma Medicaid did not cover prescriptions, the welfare system did have a special cash allowance for medicine, and the county operated a dispensary (see page 71, above) for the benefit of the poor.

When looking at the proportion of all AD recipients who incurred out-of-pocket expenses for prescriptions, there was a significant difference between sites which was closely related to the existence of Medicaid coverage for prescriptions (p = .0000). Again, however, it was mildly surprising that proportionally more persons in Oklahoma City than in Little Rock incurred such expenses despite the above-mentioned special program in Oklahoma City. Some mild racial variations existed in this regard. In all of the sites except Oklahoma City, proportionally more whites than blacks incurred out-of-pocket costs for their prescriptions. In Oklahoma City the proportions were about equal (91.9% white; 92.6% black). In Trenton only three whites and one black incurred these out-of-pocket costs, such a small sample that no real pattern can be identified. In Atlanta and Little Rock, however, larger samples were available, and in both cases more whites had out-of-pocket costs. The difference was only marginal in Little Rock (88.6% vs. 81.8%) but was substantial in Atlanta (53.6% vs. 26.7%).

Another statistic that suggests variation in intercity medical practice is the percentage of AD eligibles who were using nonprescription medicine on the advice of a physician. The intercity differences are significant (p = .0035), but inconsistent with expectations. Trenton, with the best Medicaid benefits, would logically be expected to have the smallest proportion of physician-recommended nonprescription drugs; instead, it had by far the largest proportion in this category. On the other hand, in Little Rock, with no Medicaid coverage of prescriptions and no supplemental county program, as in Oklahoma City, one would expect physicians to recommend low cost, nonprescription medicines whenever possible; instead, Little Rock had the lowest proportion in this classification. This is undoubtedly explained at least in part by the accessibility problem in Little Rock. Since it had the smallest proportion of AD eligibles who actually saw a physician in 1973 (Table 7-4), it stands to reason that proportionally more of the others would have had to self-prescribe their nonprescription medications. Naturally, a number of other factors could influence the proportion of eligibles using nonprescription medicines, such as the extent of media advertising for various patent medicines, which may vary considerably from one city to another. Finally, caution is recommended in drawing any firm inferences from this particular statistic since some evidence exists that interviewers in the four sites were not completely consistent in how they classified certain items, e.g., aspirin.

Rating of Health Status and Services

The last section of the survey instrument was designed to elicit the interviewees' opinions about health matters. Table 7-6 displays some of the

TABLE 7-6. INTERSITE COMPARISONS OF HEALTH STATUS AND HEALTH SERVICES (PERCENTAGES)--AD*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
AD eligibles rating health as "poor"				
Total	62.2	46.1	45.1	40.9
White	64.5	42.0	46.0	38.9
Black	61.2	50.0	45.2	45.1
Rating available health services as "poor"				
Total	4.6	9.1	6.3	0.8
White	6.7	8.3	4.1	1.9
Black	3.8	9.8	16.1	0.0
Citing prescription coverage as desired additional service				
Total	3.1	25.7	18.3	0.0
White	3.3	36.6	19.4	0.0
Black	3.0	18.4	17.2	0.0
Citing dental care as desired additional service				
Total	10.4	7.9	26.8	0.8
White	20.0	12.5	27.8	0.0
Black	6.1	4.1	24.1	1.6
Citing eye/vision care as desired additional service				
Total	11.5	7.9	16.2	0.8
White	13.3	7.5	16.7	0.0
Black	10.6	8.2	17.2	1.6

*See footnote to Table 7.2.

results. It is interesting to note that Trenton, with the best Medicaid program of the four sites studied, had the smallest proportion of eligibles who rated their health status as poor. What is confusing is the fact that Atlanta, with the second most complete Medicaid program, had, by a wide margin, the largest proportion who considered themselves in poor health. Furthermore, Oklahoma City, ranked by the study group as the weakest of the four cities in program benefits, had the second lowest proportion of eligibles in poor health--trailing only Trenton. In addition, it can be stated with some confidence that these unexpected outcomes are virtually free of any racial bias. In heavily black Atlanta (Table 7-1), 64.5% of the whites and 61.2% of the blacks felt their health was poor; in heavily white Oklahoma City, 46% of the whites and 45.2% of the blacks gave a similar response.

Referring again to Table 7-6, it becomes apparent that the AD eligibles do not equate their personal health status with their evaluation of the quality of health services available to them. While Trenton, once again, comes out with the best rating of available services, Atlanta is a fairly strong second, despite being a distant last in personal health status.

Finally, eligibles were asked to identify desired additional health services. In this regard, responses closely corresponded to expectations in

TABLE 7-7. INTERSITE COMPARISON OF SELECTED DEMOGRAPHIC VARIABLES (PERCENTAGES)--OAA

Characteristic	Atlanta	Little Rock	Oklahoma City	Trenton
Race				
White	37.4	53.2	73.2	50.0
Black	62.6	46.8	26.8	50.0
Age				
74 or under	51.2	49.4	44.1	59.3
75 or over	48.8	50.6	55.9	40.7
Sex				
Male	22.4	23.1	23.1	27.9
Female	77.6	76.9	76.9	72.1
Total number of persons	174	316	298	86

light of existing Medicaid coverage for prescriptions, dental care and vision care, the respective p-values being .0000, .0000 and .0004.

Overall, the analysis of the AD sample clearly indicates that eligibles in Trenton, with the most comprehensive Medicaid program, fare better than their counterparts in the other sites. As a general statement, there seemed to be substantial correlation between health care patterns and program benefits. Most departures from this pattern can be explained in terms of factors endemic to a specific location.

OAA Intersite Comparisons

Demographic Characteristics

In two of the four sites surveyed, the proportions of males and females in the OAA sample were identical, and there was only a 5.5% range between the two sites with the greatest variation. (Table 7-7 contains OAA demographic characteristics.) As was true among AD recipients, Atlanta and Oklahoma City, respectively, had the largest proportions of black and white eligibles. It appears from the data that Trenton had the "youngest" group of OAA recipients (largest proportion in the 74 or under category), while Oklahoma City had a more elderly group. No thorough analysis has yet been made of the impact this had on the survey results, but it was thought to be minimal. While it was also found that Atlanta (40.2%) and Little Rock (69.0%) had the smallest and largest percentage of OAA eligibles who lived alone, the impact of this variable was examined briefly only with respect to physician contact during 1973 (see below).

Hospitalization

Intersite variations in the proportion of OAA eligibles who had been hospitalized during 1972-73 were, simultaneously, both less marked and more consistent than the pattern for AD recipients. The high-low range encompassed

TABLE 7-8. INTERSITE COMPARISONS OF HOSPITAL AND DENTAL USE (PERCENTAGES)--OAA*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Hospitalized in 1972-73				
Total	25.9	28.8	34.4	34.9
White	30.8	31.5	35.9	35.0
Black	22.9	25.7	31.6	31.7
Regularly saw dentist				
Total	2.3	3.2	4.0	9.4
White	3.1	3.6	3.8	5.0
Black	1.8	2.7	3.9	14.3
Not seeing dentist regularly who cited lack of money as reason				
Total	13.5	10.8	16.7	1.3
White	7.9	8.0	17.1	0.0
Black	16.8	13.9	15.1	0.0
Not seeing dentist regularly who cited use of dentures as reason				
Total	49.4	58.8	56.8	61.0
White	57.1	71.0	61.0	73.7
Black	44.9	45.1	45.2	50.0
Saw dentist during 1972-73				
Total	10.4	15.1	13.8	18.3
White	6.7	12.5	13.2	10.8
Black	12.5	17.9	15.8	26.2
With out-of-pocket expense for last dental visit				
Total	81.3	54.3	70.0	14.3
White	75.0	75.0	77.8	33.3
Black	83.3	38.5	50.0	9.1
Unsatisfied need to see dentist				
Total	24.4	21.5	24.7	13.4
White	20.3	16.6	22.4	10.3
Black	26.9	27.0	31.6	15.0
Citing lack of money as reason for not seeing dentist for unmet need				
Total	69.2	62.7	73.5	9.1
White	75.0	74.1	80.0	0.0
Black	66.7	55.0	59.1	16.7

*See footnote to Table 7.2.

only a 9% spread, and there was reason to suspect that even this may have been partially attributable to sampling error (p = .1718). (See Table 7-8.) When categorized by race, proportionally more whites in all four locations had been hospitalized, and intersite differences among whites were never greater than 5%.

Once again, Trenton had the highest proportion of eligibles hospitalized--despite the fact that all four locations covered this mandatory service. The fact that Atlanta and Little Rock had the smallest proportions of hospitalized eligibles can be explained by several factors. In the case of Little Rock, the serious geographical maldistribution of facilities (p. 48) certainly must have been a major barrier to hospitalization. In Atlanta, on the other hand, relatively low hospitalization may have been largely a reflection of the extensive, readily available outpatient facilities at Grady Hospital. Based on information from the presurvey site visit, this would also help to explain the relatively wider gap between white and black subgroups in Atlanta, since far more blacks than whites utilize the facilities at Grady.

Taken overall, the relatively unimportant differences in hospitalization between locations is consistent with initial expectations for a mandatory benefit.

Dental Care

Widespread use of dentures among OAA eligibles appears to be a major factor in both the extremely small proportion who had established a pattern of regular dental visits and the only slightly larger group who had seen a dentist in 1972-73. These results were not particularly surprising. (Table 7-8 contains all dental data referred to in this section.) In general, the dental care patterns among the four locations had at least a mild correlation with the Medicaid coverage available, but the differences were not always as great as might have been anticipated.

The major exception to the coverage-conforming pattern appeared in the proportions of OAA eligibles who reported that they "regularly saw a dentist." Naturally, one would expect the largest positive response to this question in Trenton and Little Rock, where essentially full dental benefits were available; in addition, given similar demographic/socioeconomic characteristics of the OAA samples in the two locations, it would be logical to expect that their respective responses to this and other utilization questions would be similar. Note, however, that nearly three times as many eligibles reported regular dentist visits in Trenton as in Little Rock; for the other dental care comparisons, Trenton consistently maintained this advantage, and in several instances the differences were even more dramatic. In fact, in a number of intersite comparisons, the gap between Trenton and Little Rock--both providing coverage--is considerably greater than the disparity between Little Rock and the other two locations which had little or no Medicaid coverage.

All this suggests that some other disturbing variable must have been present, and the apparent culprit is the reportedly unsatisfactory delivery system in Little Rock, where it previously has been reported that the East End, the major poverty area, had a general dearth of providers for all kinds of health services. There may also have been a general shortage of Medicaid-participating dentists throughout Pulaski County as a whole, though very few respondents reported a provider as unwilling to participate in the program. General awareness of eligibility and local dental "fashion" may also be reflected in these figures.

The proportion of OAA eligibles without regular dental care patterns citing lack of money as their reason for regularly seeing a dentist was, in all sites, only fractionally as large as the proportion that cited use of dentures as the reason. It is probably safe to assume that most, if not all, of the OAA eligibles who use dentures have not established regular dental patterns and, when asked, would give this as the reason for not having done so. Still, it was mildly surprising that the proportion citing this reason was so large, especially in locations without Medicaid coverage, where it might have been expected that the financial barrier would have been more prominent. Note that even in Atlanta and Oklahoma City between three and four times as many eligibles cited dentures as lack of money.

If the above assumption is true, it would also mean that the proportion citing dentures as the reason for no regular dental care pattern also approximates the actual proportions of eligibles with dentures. If this is correct, the modest size of the intercity differences (from a low of 49% in Atlanta to a high of 61% in Trenton, p = .1871) is surprising; because of the very high cost of dentures, one would have anticipated rather marked differences between sites with different coverage patterns. Yet the p-value cited above is not particularly strong. Furthermore, for the intersite discrepancies that do exist, other explanations may be more significant than variations in Medicaid benefits. The comparatively low proportion in Atlanta, for example, is probably explained by the high proportion of blacks in its OAA population. Controlling for race, it can be seen that blacks consistently appeared to have lower use of dentures than whites by significant margins. Among the whites only, intersite differences are not only more marked (p = .0726), but they also follow a far more predictable pattern in relation to the availability of benefits. Among the blacks, the availability of Medicaid coverage appeared to have little influence on denture use (p = .9560), which suggests that "fashion" or cultural differences in the black community constitute more important variables. Alternatively, it is possible that black OAA eligibles in Atlanta are able to obtain dentures through Grady Hospital or one of the many other public and private voluntary programs in the area, e.g., the OEO-sponsored Southside Comprehensive Health Care Center or the Benjamin Massell Dental Clinic; in Oklahoma City they may be receiving dentures through Medicaid under the "acute pain and suffering" provision.

In those relatively few cases where lack of money was cited as the reason for not regularly seeing a dentist, the proportions did conform with Medicaid coverage patterns, i.e., it was lowest in Trenton and Little Rock, but, here again, the difference between Trenton and Little Rock was greater than between Little Rock and the other two sites. This led to p-values which were stronger across all four locations (p = .0023) than when grouped by coverage (p = .0051).

In Trenton, only 1.3% ascribed their irregular or nonexistent dental patterns to financial difficulties. These were, for the most part, Spanish-speaking eligibles (this explains the two zero percentages in the black and white rows of Table 7-8), so that ignorance of the benefit structure due to a language barrier may have been a slight problem. In any case, this minute group citing a financial barrier highlights the comprehensive nature of the New Jersey Medicaid program as well as the high level of awareness on the part of eligibles regarding the benefits to which they are entitled.

As noted above, the differences between Little Rock and noncoverage sites were not as large. This may have been due to the preauthorization provision in the Arkansas Medicaid program; some dentists may be unwilling to engage in the necessary paperwork entailed in preauthorization.

Overall, Trenton and Little Rock had the highest proportion of OAA eligibles who had seen a dentist in 1972-73. The direction and magnitude of these differences was not consistent across all subpopulations, however, except that Atlanta, the one site which had no dental coverage at all for adults, was a distant fourth among both races.

Out-of-pocket expenses for dental care also conformed with coverage patterns, but, again, the p-value across all four sites (.0006) was stronger than the one for Trenton and Little Rock vs. Atlanta and Oklahoma City (.0038). Note that Atlanta, despite its several public and voluntary dental programs, had the worst record in this regard. It was also surprising to find such a large proportion of eligibles in Little Rock apparently paying for a covered service. Whether this was primarily a result of unfamiliarity with the benefit structure or a reflection of a shortage/inaccessibility of participating dentists was not clear.

The proportions of eligibles reporting unmet dental needs and the proportions attributing this to a lack of money also followed coverage patterns. Once again, however, it was perplexing to find such huge differences between the two covered locations, Trenton and Little Rock.

It is also noteworthy to observe that a fairly consistent pattern emerged across the various sites of proportionally more blacks than whites with recent dental visits and perceived unmet needs. This contradicts the patterns found among children (cf., the AFDC section which follows) and also conflicts with the popular belief that whites are more cognizant of dental needs than blacks. On the other hand, it does not seem too surprising that the pent-up dental needs of elderly blacks should exceed those of their white counterparts who are less likely to have suffered from a lifetime of neglect.

In summary, the results of the survey clearly indicate that removal of the financial barrier to dental care through provision of Medicaid benefits does have a substantial impact on the utilization and perceived need patterns of the elderly poor. The Little Rock experience also indicates that in the absence of an adequate and well-located supply of providers and a full understanding of program benefits on the part of eligibles, this impact is understandably minimized. Data from Atlanta suggest that a patchwork of local and voluntary programs simply does not constitute an adequate substitute for Medicaid, at least not where these alternative programs are underfunded and uncoordinated, two features which appear to have been historically endemic to such "systems." Even if adequately funded, moreover, such programs would

TABLE 7-9. INTERSITE COMPARISONS OF EYE/VISION CARE (PERCENTAGES)--OAA*

Care	Atlanta	Little Rock	Oklahoma City	Trenton
Obtained glasses after 1/1/72				
Total	29.1	21.8	16.4	42.4
White	26.2	22.0	16.5	40.0
Black	30.8	21.6	17.1	42.9
Obtained glasses that incurred out-of-pocket expenses for them				
Total	89.6	91.3	89.1	11.4
White	93.8	91.9	90.6	13.3
Black	87.5	90.6	84.6	5.6
With unmet need for glasses				
Total	42.4	33.8	37.4	22.0
White	42.2	30.5	35.1	20.5
Black	42.5	37.4	44.7	25.0
Unmet need for glasses who cited lack of money as reason				
Total	62.7	69.5	80.4	13.3
White	73.1	74.5	81.7	0.0
Black	56.1	64.8	78.8	25.0
Last visited eye doctor in 1972-73				
Total	41.3	33.4	29.5	50.0
White	32.3	37.8	30.0	39.5
Black	46.7	28.6	27.6	57.1
Unsatisfied need to see eye doctor				
Total	41.5	38.4	40.6	19.8
White	36.9	32.9	39.6	18.4
Black	44.3	44.8	43.4	21.4
Unmet need to see eye doctor who cited lack of money as reason				
Total	50.7	76.7	76.3	13.3
White	65.2	74.5	75.3	0.0
Black	43.2	78.5	78.8	25.0

*See footnote to Table 7.2.

probably lack the flexibility of comprehensive coverage under Medicaid or some other publicly funded program. The OAA may be particularly vulnerable to any lack of flexibility due to their limited mobility. However, as revealed in the stark contrast between Trenton and Little Rock, this additional flexibility and its attendant advantages depend upon informing both providers and eligibles of the coverage and motivating an ample number of providers to participate in the program. Failure to adequately compensate providers for such care, for example, may more than offset any advantages inherent in comprehensive Medicaid coverage.

Eye/Vision Care

Table 7-9 displays intersite comparisons for eye/vision care. Remembering that Trenton was the only location studied which provided any coverage for eyeglasses and optometric services to OAA eligibles, the clear advantages enjoyed by the elderly poor in that city are no surprise. The data suggest significant differences in the utilization of vision care services (for last visit to eye doctor, p = .0048; for obtaining glasses, p = .0000), in the proportion with out-of-pocket expenses for eyeglasses (p = .0000), the proportions with unmet needs (for glasses, p = .0097; for seeing eye doctor, p = .0006), and in the proportion who attributed unmet needs to lack of money (p = .0000).

Among the three cities with no eye/vision care service coverage under Medicaid, the relative rankings varied somewhat between the seven categories shown in Table 7-9; on balance, however, Atlanta appeared to rank second to Trenton, with Little Rock and Oklahoma City following in that order. In the important service categories of obtaining glasses and actually seeing the eye doctor, Atlanta was a fairly strong second, a fact that is probably traceable to the wide range of supplementary eye care programs available in that city (pp. 21, 22 above). Despite having a higher proportion who had received these services, however, Atlanta also reported the highest levels of unmet needs for both glasses and the eye doctor, though in the latter case the differences among the three sites other than Trenton were marginal. This may indicate that some of the voluntary programs in Atlanta did a better job of making eligibles aware of needs than of satisfying those needs.

It was mildly surprising to find that more vision services were used in Little Rock than in Oklahoma City in light of the acknowledged shortage of providers in the former city. Admittedly, the differences were not great.

Racial differences among those who had obtained glasses were neither as persistent nor as great in magnitude as had been found among AD recipients. In all four sites, however, more whites than blacks among the OAA incurred out-of-pocket expenses for their glasses and more blacks than whites expressed unmet needs for glasses. In three of the four sites, Trenton being the exception, proportionally more whites than blacks cited lack of money as the reason for not obtaining needed glasses. Since only two persons--both black--cited this reason in Trenton, the "reversal" in pattern can hardly be viewed as convincing.

While rather sizable racial variations existed with respect to 1972-73 visits to eye doctors, blacks had higher rates of use in two locations (Trenton and Atlanta) while whites had higher use in the other sites. Across the four locations, whites reported rather uniformly low rates of use that seemed little affected by Medicaid coverage (p = .3721), while blacks showed very wide variations between Trenton (57.1%) and Oklahoma City (27.6%). Blacks had greater reported unmet needs to see an eye doctor in all four locations, by margins ranging from 3% (Trenton) to 11.9% (Little Rock). Proportions attributing unmet needs for an eye doctor to lack of money were almost equal in Little Rock and Oklahoma City. In Atlanta, this problem seemed far more pronounced among whites, a fact attributable to their greater reluctance to participate in some of the extra-Medicaid benefits available, notably through Grady Hospital. (Reported in presurvey site visit.)

Again, the data clearly demonstrate that the availability of Medicaid benefits sharply increased the use of services and decreased the reported levels of unmet needs and out-of-pocket expenditures.

Physician Visits

Intersite differences in the proportion of eligibles without chronic conditions who had seen a physician during the first half of 1973 were generally modest enough, as was the case among the AD, to suggest that, for this mandatory benefit, sampling error was the major variable ($p = .5160$). Trenton did, as usual, have a slightly higher utilization rate, and the poor supply and distribution of physicians in Little Rock was clearly reflected in the lower utilization there. The biggest variations by race occurred in Atlanta and Oklahoma City. In each of these locations, the predominant OAA client group, blacks and whites, respectively, had the higher utilization. In Atlanta, this result was expected in light of the presurvey investigation which had indicated that whites were far more reluctant than blacks to use the extensive outpatient facilities at Grady Hospital.

As for the tentative hypothesis which was advanced at the outset of the study with respect to the possible substitution of physician visits for prescriptions in locations where prescription benefits are not available, the data provide no support for that contention insofar as nonchronic patients are concerned.

Most of the rest of the tabular data shown with reference to OAA physician visits defy easy explanation, with both intercity and interracial patterns being quite mixed. With respect to the proportion of chronic patients "who usually received injections during an office visit," the intersite comparison for all OAA eligibles did seem to mildly support the substitution hypothesis; substantially more injections were administered to eligibles in Little Rock and Oklahoma City, the two locations without prescription benefits. Among the whites only, however, Oklahoma City and Trenton were high, while among blacks only, Little Rock and Atlanta were high. The crazy-quilt pattern continued as to the proportion of chronic patients "who usually received a prescription during an office visit." Overall, most prescriptions were written in Little Rock--with no prescription benefits. Among white eligibles, the highest proportion was found in Atlanta with prescription coverage, while among blacks, Oklahoma City (without coverage) ranked first. The largest proportion of OAA eligibles to receive free medicine samples was found in Atlanta, where prescriptions were covered, rather than in one of the locations without this benefit, as might have been predicted. Indeed, Little Rock, with no prescription benefits, had by far the smallest proportion of eligibles who were given free samples. Again, racial differences were large but inconsistent.

There were marked differences ($p = .0000$) among the survey sites with respect to the proportion of chronic eligibles who "usually incurred out-of-pocket expenses for an office visit" with a physician. The very large group reporting such expenses in Little Rock probably results from the provider shortage in the East End and the likelihood that eligibles were forced to use nonparticipating physicians from other sections of the city, but it may be accentuated--especially in the case of chronic patients--by the yearly limit of eighteen covered physician visits before preauthorization was required. This was of doubtful impact, however, in an approximately six-month recall

TABLE 7-10. INTERSITE COMPARISONS OF PHYSICIAN USE (PERCENTAGES)--OAA*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles without chronic conditions who had physician contact in 1973				
Total	44.7	36.9	42.2	45.5
White	40.7	37.3	44.4	48.0
Black	46.6	36.6	35.9	44.4
Chronic patients who usually received injections during office visit				
Total	28.7	36.5	40.3	26.3
White	21.1	26.6	44.7	28.6
Black	34.7	49.0	34.3	27.3
Chronic patients who usually received a prescription during office visit				
Total	91.7	95.3	92.6	94.4
White	97.1	96.5	89.0	92.3
Black	87.8	94.0	100.0	95.2
Chronic patients who usually received free sample of medicine during an office visit				
Total	14.8	7.0	13.0	10.5
White	5.3	6.3	18.8	14.3
Black	22.0	7.8	0.0	9.1
Chronic patients who usually incurred out-of-pocket costs for an office visit				
Total	13.3	40.5	14.2	18.9
White	21.1	49.2	17.1	0.0
Black	6.7	30.0	8.6	27.3
All eligibles with a regular group of doctors				
Total	49.4	74.4	75.8	62.7
White	56.9	81.1	78.7	60.0
Black	45.0	66.9	68.4	64.3
Unsatisfied medical need after 1/1/73				
Total	28.7	20.9	22.6	9.8
White	30.8	23.2	20.8	15.4
Black	27.5	18.2	28.9	4.8
Unmet medical need who cited lack of money as reason for not seeing the doctor				
Total	22.7	56.1	20.0	0.0
White	16.7	59.0	23.3	0.0
Black	26.9	51.9	9.5	0.0

*See footnote to Table 7.2.

period and, in any case, the limit of four covered visits per month in Oklahoma City had no clearly visible impact.

The sizable difference in the proportion of all OAA eligibles with a regular doctor or group of doctors (p = .0000) was largely attributable to the very low rating of Atlanta, where less than 50% of the eligibles had a "regular doctor." Again this apparently reflects the role of Grady Hospital, especially among the blacks. In all locations except Trenton, there was a pronounced tendency for more whites than blacks to have identified with a single physician. In Trenton the interracial differences were very small.

Unsatisfied medical needs, though varying widely among the cities studied (p = .0072), could not be correlated with the presence or absence of prescription coverage in the local Medicaid programs. (Trenton was low; Atlanta was high; both covered prescriptions.) Neither was there any consistent racial pattern for unmet medical needs.

The variation in the proportions citing lack of money as the reason for unmet medical needs was shocking (p = .0000). No clear explanation exists in the data for the fact that one-fifth or more of these eligibles feared out-of-pocket costs in Atlanta and Oklahoma City and over half did so in Little Rock. These results probably reflect either the use of nonparticipating physicians (where the eligible knows in advance that he would be charged for the service), or ignorance of program benefits.

It may also be true that a number of the elderly simply continue with long-established health care patterns, insofar as possible, even after they become eligible for OAA benefits, possibly being too proud to notify the physician of their welfare eligibility. To accept this explanation in toto, however, it would be necessary to determine why the figures in Trenton are so different from those in the other locations. Further study is clearly indicated before a satisfactory explanation can be offered for the vagaries of the intersite comparisons of physician services.

As was mentioned in the introduction to this chapter, two sets of comparisons were made with respect to the use of physician services during 1973 and the degree of unmet needs for a physician visit during the same period based on the living arrangement of the OAA eligibles--either single or multiple person households. The results showed that in all locations except Oklahoma City, a larger proportion of eligibles in multiple person households had made a physician contact. The margin ranged from 6-8% in those three sites. In Oklahoma City, however, 2% more of the persons living alone had had a physician contact. In all four locations a larger proportion of those who lived alone reported an unmet need for a physician visit during 1973. The margin did not seem significant in Little Rock or Oklahoma City, but it did appear to be more important in Atlanta and Trenton. At the very least, these findings suggest that further analysis is in order on this particular variable.

Prescriptions

Table 7-11 displays intercity statistics relating to prescriptions. Once again, Trenton, which did afford prescription benefits, had the highest proportion of both chronic and nonchronic eligibles who had received new prescriptions after January 1, 1973. Atlanta, also with prescription coverage, ranked second in relation to nonchronic conditions but last with respect to chronic conditions.

7-11. INTERSITE COMPARISONS OF PRESCRIPTIONS (PERCENTAGES)--OAA*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles with chronic conditions who received new prescriptions after 1/1/73				
Total	65.1	71.9	65.3	73.0
White	76.3	64.1	63.9	69.2
Black	56.3	82.0	67.6	72.7
Eligibles with chronic conditions who filled all new prescriptions				
Total	96.2	100.0	96.2	100.0
White	100.0	100.0	96.2	100.0
Black	92.3	100.0	95.7	100.0
Eligibles without chronic conditions who received new prescriptions after 1/1/73				
Total	65.6	61.5	57.1	68.8
White	80.0	60.5	59.5	63.6
Black	59.1	63.0	46.2	80.0
Eligibles without chronic conditions who filled all new prescriptions				
Total	100.0	97.5	93.8	100.0
White	100.0	95.7	96.0	100.0
Black	100.0	100.0	83.3	100.0
All eligibles with new prescriptions who had out-of-pocket expense				
Total	51.0	97.5	94.2	4.6
White	69.5	98.8	95.7	3.3
Black	38.1	95.7	90.3	6.1
All eligibles using nonprescription medicines who were doing so on the recommendation of a physician				
Total	32.0	17.3	26.6	30.8
White	47.6	23.1	30.3	26.3
Black	20.7	10.5	12.2	38.9

*See footnote to Table 7.2.

In any case, the intersite differences for both chronic (p = .5791) and nonchronic (p = .7929) conditions were so minor as to suggest sampling error as a major variable when the total OAA samples were compared. When subclassified by race, intersite differences became somewhat more significant, especially among blacks. Surprisingly, among the blacks, differences were more significant for both chronic and nonchronic conditions when all four sites were compared than when they were grouped according to Medicaid benefits. Though the white subpopulation did not reflect this latter anomaly, neither did it reflect any great level of significance between locations.

No ready inferences are possible from these data; there simply is no clear, consistent pattern present either by city, coverage pattern or race insofar as the receipt of new prescriptions is concerned. Once again, however, the data suggest that virtually all issued prescriptions are filled by OAA eligibles whether or not Medicaid benefits are available. Filling prescriptions also seemed to be relatively unaffected by the need to incur out-of-pocket expenses for them, though the proportions of eligibles who did incur such costs were clearly affected by coverage patterns. Questionnaire responses in Atlanta suggest strongly that over 50% of the eligibles in Atlanta who filled prescriptions incurred out-of-pocket costs in connection with this covered benefit, the comparable figure in Trenton was only 4.6%, while the proportion hovered around 95% in the two locations without coverage. Of those in Atlanta who did incur out-of-pocket expenses for prescriptions, approximately 90% indicated that they were unaware of Medicaid coverage for this benefit. In Atlanta there was a significant variation by race with respect to out-of-pocket expense. Again, this may be partially attributed to the racial patterns of use of Grady Hospital. However, it may also be due, at least in part, to better knowledge of program benefits by black eligibles. As was suggested previously, the general tie-in between the civil rights movement of recent years and the various welfare rights activities in this country has been strong. When added to the different living patterns/neighborhood structures usually found between blacks and whites, this may account for some of the differences in the use of and payment for services by blacks and whites. Only in Trenton did proportionally more blacks than whites report paying out-of-pocket--by a factor of roughly two to one. For both races, however, the proportions were very small. No clear explanation for this reversal was found.

Of all the eligibles who were using nonprescription medicines at the time of the survey, Atlanta and Trenton had the largest proportion who were doing so at the suggestion of a physician. This again undermines any possible hypothesis regarding a substitution effect, since the two coverage sites also had the most physician-recommended nonprescription medicine in use, a result which is exactly the opposite of what might have been expected. Buried in these figures are some possible implications regarding the quality of care, and further analysis in this regard is contemplated. Interestingly, though, in three of the four locations (Trenton is the exception) significantly more whites than blacks have been advised to use nonprescription medicines. This, too, would on the surface appear to be in conflict with a fairly popular folklore which suggests that blacks generally receive a lower quality of care than whites. By no means, however, is it possible on the basis of the above data and discussion to make any definitive observations on the quality of care issue. Further, the same caveats listed under the parallel discussion for AD eligibles, above, apply here.

Rating of Health Status and Services

It was to be expected that, given the infirmities of age, a fairly sizable proportion of OAA eligibles would consider their health as "poor"; the proportion was over 30% in all locations except Trenton, where it was only 15%. (See Table 7-12 for the data used in this section.) While the low proportion in Trenton is consistent with the breadth of benefits available there, the same anomaly exists with reference to Oklahoma City as did among the AD. That is, though it had the most limited Medicaid program among the

TABLE 7-12. INTERSITE COMPARISONS OF HEALTH STATUS AND HEALTH SERVICES (PERCENTAGES)--OAA*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
OAA eligibles rating health as "poor"				
Total	36.2	37.5	30.4	15.3
White	41.5	42.0	30.5	7.5
Black	33.0	32.4	31.6	19.0
Rating available health services as "poor"				
Total	7.2	7.1	8.2	1.2
White	6.5	8.6	8.1	2.6
Black	7.6	5.5	6.7	0.0
Citing prescription coverage as desired additional service				
Total	7.6	29.3	29.5	0.0
White	12.3	34.6	26.7	0.0
Black	4.6	23.1	36.2	0.0
Citing dental care as desired additional service				
Total	9.7	4.6	12.3	4.1
White	7.0	5.2	14.1	0.0
Black	11.5	3.8	8.7	8.3
Citing eye/vision care as desired additional service				
Total	11.8	10.2	17.9	2.7
White	8.8	11.8	19.4	0.0
Black	13.8	8.5	15.9	5.6

*See footnote to Table 7.2.

sites surveyed, Oklahoma City had the second smallest proportion of eligibles in "poor" health. Again, some sophistication in health matters is evidenced by the OAA eligibles in Oklahoma City insofar as they also have the largest proportion who rated the city's available health services as poor. Realistically however, intersite differences on these two matters are insignificant except in comparing Trenton against the other three sites. Racial differences between locations were inconsistent and insignificant with reference to the rating of health services; with respect to health status, they were inconsistent and significant--except in Oklahoma City, where the racial rankings of health status were virtually the same. No ready explanation is available in the data for the fact that 8-10% more whites than blacks considered their health to be poor in Atlanta and Little Rock, while this complaint was voiced by nearly 12% more blacks than whites in Trenton.

As was true among the AD group, the desire for specified additional services of prescription coverage, dental care benefits or eye/vision benefits was highly correlated with existing benefit structures, indicating a fairly high level of awareness of existing benefits among the OAA eligibles. Again, racial patterns, though occasionally pronounced, are inconsistent (i.e., no consistent black/white differences over services or cities).

TABLE 7-13. INTERSITE COMPARISON OF SELECTED DEMOGRAPHIC VARIABLES (PERCENTAGES)--AFDC

Characteristic	Atlanta	Little Rock	Oklahoma City	Trenton
Race (Adults)				
White	8.5	15.7	44.9*	29.7
Black	91.5	84.3	51.7*	71.3
Race (Children)				
White	7.8	12.2	57.2*	26.2
Black	92.2	87.8	40.1*	73.8
Age				
Children (under 21)	74.9	75.8	77.5	74.6
Adults (21 and over)	25.1	24.2	22.5	25.4
Sex (Adults)				
Male	2.8	2.6	4.8	6.6
Female	97.2	97.4	95.2	93.4
Sex (Children)				
Male	46.7**	50.4**	49.9	50.5
Female	52.9**	49.3**	50.1	49.5
Total number of adults	428	324	204	610
Total number of children	1403	1195	700	1823
Total number of AFDC	1831	1519	904	2433

*These totals do not equal 100 because of the omission of a small group of American Indians--found only in Oklahoma City--from the intersite comparisons.

**These percentages do not add to 100.0 because of failure to have sex reported for some children

In summary, the data for the OAA eligibles consistently indicate that eligibles in Trenton have higher utilization rates, lower out-of-pocket expenses, fewer unmet needs and perceive themselves to be in better health than their peers in the other cities. The other three sites, however, do not conform to any consistent pattern, thus making analysis more difficult and tenuous. It does seem safe to conclude that, in general, the removal of financial barriers to health care via provision of Medicaid benefits did have a positive effect on both the use of services and the health status of OAA eligibles. A multitude of other variables are also involved, though, and not all of them can be identified from the survey database.

AFDC Intersite Comparisons

Demographic Characteristics

The intersite comparisons of the AFDC sample are simplified somewhat by the fact that a majority of the demographic characteristics displayed in Table 7-13 vary only slightly among the four survey locations. For example, there is less than a 3% variation among the cities in the respective proportions of adults and children; with respect to sexual characteristics, less than 4% separates the cities in either the adult or children classifications. Despite these similarities, however, there are marked differences between locations in the racial composition of the AFDC eligibles. As might be inferred from the above, much of the attention in the analysis which follows will be focused on intercity racial variations, but some separate consideration will be given to the child/adult breakout because many optional services are available only to children through the screening programs. Note that because of the larger sample sizes involved with AFDC eligibles, somewhat more reliable inferences are possible than was true in the smaller AD and OAA groups.

Hospitalization

There were significant differences between the cities in the proportion of all AFDC eligibles who were hospitalized in 1972-73, p = .0000 (see Table 7-14), despite the fact that hospital benefits were mandatory in all four sites. These differences were more marked among blacks (p = .0000) than among whites (p = .1112) and, among the blacks, slightly more significant among children (p = .0000) than among adults (p = .0001). In all of the locations except Trenton, the percentage of blacks hospitalized ran from 5-10% lower than for whites. In Trenton, the black/white proportions were the same, but the rate for Spanish-speaking eligibles was quite a bit lower (no separate analysis was done on this group; there were very few Spanish-speaking eligibles in the other three locations).

The overall hospitalization rate was highest in Trenton, the city with the best overall Medicaid package, thus negating again the substitution hypothesis referred to earlier. The second highest level of hospitalization was found in Oklahoma City. This is probably race-related, since Oklahoma City had, by a wide margin, the largest proportion of white AFDC eligibles, and, as has just been noted, there was a pattern of greater hospital use by whites in most locations. The low percentage of hospitalization in Little Rock was expected in light of earlier documentation of the maldistribution of and poor accessibility to facilities in that city. The relatively low rate of hospitalization in Atlanta was at first mildly surprising, in light of the dominant role played by Grady Hospital in delivering health care to the poor in that city. The apparent explanation is that the bulk of the services provided by Grady are provided on an outpatient basis through its emergency room and clinics.

The data also revealed significant differences (p = .0047) between the cities in the total number of days patients were hospitalized. Among both black and white recipients, Trenton had the smallest percentage who were hospitalized for the brief period of only one to seven days. Trenton also had the largest percentage hospitalized for a period of fifteen days or more in both racial groups. This may be more a reflection of local medical practice than anything else, however, for national data have rather consistently shown the northeastern states to have longer average lengths of stay for the full population, not just welfare eligibles. Among the three southern cities, Atlanta had markedly longer average lengths of stay than either of the other cities, and again, this was true for both blacks and whites.

Dental Care

Significant differences between cities were also apparent (Table 7-14) in the proportion of eligibles who regularly saw a dentist, p = .0000, and, again, the significance level was as great for both black and white eligibles. Overall, proportionally, more whites than blacks reported regular dental visits in all locations, with this tendency especially pronounced among the children under age 21. As noted earlier, this fits with the generally accepted notion that whites are more cognizant of dental needs than blacks. Among the AFDC adults only, there were actually proportionally more blacks than whites reporting regular dental visits in Atlanta and Oklahoma City.

It was only mildly surprising to find a higher proportion of regular dental visits in Atlanta (Medicaid dental benefits only to eligibles up to age 6) than in Little Rock (full dental coverage under Medicaid) in light of the free dental services available in Atlanta, e.g., Benjamin Massell Clinic and Grady Hospital. It was more surprising to note that the Oklahoma City figures showed barely any improvement when the children were broken out, since Oklahoma Medicaid did cover children's dental services through age 20. In Atlanta, where dental coverage was extended only to children through age 6 under Georgia Medicaid, a much higher regularity of care was reflected only among white children when adults were removed from the sample, with the proportion of black children who saw the dentist regularly being very close to the overall percentage for all AFDC eligibles. This would appear to indicate that a larger proportion of black than white children made use of the extra-Medicaid services available in the area. At least with respect to Grady Hospital's dental clinic, this jibes with information gathered during presurvey discussions with welfare officials in Atlanta.

Lack of money was cited as the reason for not making regular dental visits by 17.2% and 2% of the total AFDC groups in Little Rock and Trenton, respectively. The comparable proportions in Atlanta and Oklahoma City were 20.3% and 21.2%. These figures were consistent with expectations based on Medicaid coverage. In all locations except Trenton, the proportion of whites citing lack of money as the reason for not having regular care exceeded the comparable proportion of blacks by wide margins--ranging from about two and one-half to one in Atlanta to over four to one in Oklahoma City. This tendency was slightly more pronounced among children than adults. In Trenton, the situation was reversed in all categories, but the range was narrow and the cell sizes of those citing lack of money as a barrier were so small that no great reliability could be placed in them.

Dentures were cited as the reason for not seeing the dentist regularly by just over 25% of the white adults, with the differences between cities ranging from 16.7% in Oklahoma City to 34.5% in Trenton, p = .0618. When grouped according to Medicaid benefits (i.e., Trenton and Little Rock vs. Atlanta and Oklahoma City, the p-value became predictably more significant, p = .0186. Among black adults, dentures were quite a bit less common--a familiar pattern--only 9.2% of the group citing them as a reason for not making regular dental visits. Here the variation between cities was again great, p = .0000, ranging from 3.4% in Oklahoma City to 11.7% in Trenton. More blacks in Atlanta (11.1%)

TABLE 7-14. INTERSITE COMPARISONS OF HOSPITAL AND DENTAL USE (PERCENTAGES)--AFDC*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Hospitalized in 1972-73				
Total	20.1	16.4	24.9	25.6
White children	22.0	15.7	24.7	24.3
Black children	14.8	12.0	15.4	20.4
White adults	37.5	39.6	50.6	31.5
Black adults	35.2	29.1	45.6	45.0
Regularly saw a dentist				
Total	24.6	20.8	13.1	32.4
White children	41.3	35.4	14.7	51.3
Black children	26.4	20.5	11.2	29.0
White adults	6.3	20.8	11.4	35.1
Black adults	15.7	13.8	15.2	31.6
Not seeing dentist regularly who cited lack of money as reason				
Total	20.3	17.2	21.2	2.0
White children	45.3	40.9	33.5	0.6
Black children	16.2	12.7	7.0	1.9
White adults	46.2	31.6	52.6	2.4
Black adults	24.9	21.5	19.1	3.4
Saw dentist during 1972-73				
Total	50.3	37.4	31.7	43.5
White children	61.0	55.9	34.0	58.6
Black children	49.3	33.7	22.0	37.0
White adults	40.6	36.2	52.3	51.5
Black adults	51.5	42.1	39.2	49.9
With out-of-pocket expense for last dental visit				
Total	28.7	18.1	36.6	3.6
White children	28.6	18.6	38.3	6.3
Black children	17.2	8.9	23.7	0.9
White adults	69.2	75.0	67.4	10.8
Black adults	57.1	37.5	31.6	5.8
Unsatisfied need to see dentist				
Total	21.8	16.5	22.8	7.6
White children	20.2	19.7	19.1	3.3
Black children	14.7	10.6	16.0	4.3
White adults	53.1	37.5	48.9	17.6
Black adults	42.8	33.0	41.9	18.5
Citing lack of money as reason for not seeing dentist for unmet need				
Total	52.8	63.8	60.7	8.2
White children	77.3	71.4	87.5	0.0
Black children	41.4	62.2	32.8	11.1
White adults	82.4	83.3	90.0	0.0
Black adults	58.9	59.8	41.5	9.6

*See footnote to Table 7-2.

than in Little Rock (5.5%) cited dentures in this context, contrary to expectations based on Medicaid coverage. This may be the result of the above-mentioned heavier use of extra-Medicaid programs by blacks in Atlanta.

The proportion of AFDC eligibles who had seen a dentist more recently than January 1, 1972 (Table 7-14) varied from 31.7% in Oklahoma City to 50.3% in Atlanta (p = .0000), and the fact that Atlanta outdid even Trenton--despite lack of significant Medicaid coverage in Atlanta--suggests that the many public and voluntary agencies in that city were performing considerably better than the survey team had been led to believe in the presurvey discussion with welfare officials. Once again, there was a consistent pattern across all four cities of more whites than blacks having seen a dentist during the reference period, with this tendency again being most pronounced among the children. Among AFDC adults only, proportionally more blacks than whites had seen a dentist in Atlanta and Little Rock. This phenomena can be explained in Atlanta by the previously discussed role of Grady Hospital and the racial patterns pertaining thereto. No such obvious reason exists in Little Rock.

Interestingly, Trenton and Little Rock, with coverage of dental care, had a significantly higher proportion of single rather than multiple dental visits when compared with the other two cities (p = .0743). This at least hints at an inference that coverage may lead to earlier, preventive dental measures rather than extensive restorative work after a period of neglect.

Out-of-pocket payments for the most recent dental visit generally followed a predictable pattern, based on Medicaid coverage available, though there were some minor deviations in the adult category (Table 7-14). Once again, there were very sharp racial differences in this regard, with a consistently larger proportion of whites than blacks incurring direct costs.

Among all AFDC eligibles, the percentage reporting an unmet need to see a dentist during the reference period also followed a predictable pattern; that is, Trenton and Little Rock had the lowest percentage with this complaint, and they were the cities with full coverage. The pattern was consistent across all subpopulations except among white children, where Little Rock slipped to third place, midway between Oklahoma City and Atlanta. This was not too surprising, though, since the latter two cities did provide dental benefits for children--in the case of Oklahoma City, through age 20; in the case of Atlanta, to age 6. Then too, it should be noted that, once again, the margin between Trenton and Little Rock, both covered cities, was considerably greater than between Little Rock and the other two cities. This will be found to be the case with respect to several other services as well, yet the research team has not been able to extract from the survey data any clear reason why this should be so. It may simply be a regional difference based on a whole complex of unidentified, interacting variables.

Once again, sharp racial differences were evident. In all of the locations except Trenton, proportionally more whites than blacks reported unmet dental needs in all subpopulations--by margins of from 3 to 10%. In Trenton, for reasons that are not immediately clear, more blacks than whites claimed unmet needs in all subpopulations, but never by a margin of more than one percentage point.

In comparing sites on the percentage of those eligibles who reported lack of money as the reason for their unmet dental need, some surprises appeared as well as some familiar patterns. Trenton was low in all subpopulations. But Little Rock, with full coverage available, was high among the four cities for the total AFDC sample, a finding that was more than a little unexpected. Once again, this may possibly be related in some fasion to the relatively poor distribution of providers in the Little Rock area. It could be hypothesized, for example, that poor geographical distribution of providers coupled with a poor public transportation system would lead to a need for cab fare in order to get to the provider; if that were the case, lack of cab fare could be a major deterrent to treatment. The relatively good showing of Atlanta on this point is traceable to the many voluntary dental care facilities that were available there.

Racial variations on the matter of lack of money as a causal factor in the case of unmet needs were truly remarkable. While Trenton again proved to be an exception--not a single white reporting this problem there--across all subpopulations in the other three sites more whites than blacks had this complaint--by margins ranging from a low of 9% among children in Little Rock to a high of 55% among children in Oklahoma City.

Only speculative conclusions are possible, based on the survey data, to explain the consistent racial patterns noted above. With larger proportions of whites than blacks reporting use of services, out-of-pocket payment for services, unmet needs for services, and lack of money as a reason for having unmet needs, several seemingly plausible explanations are possible. First, it appears that whites either have inherently more dental problems than blacks, greater appreciation/awareness of the benefits to be gained from treatment and/or lower thresholds of pain which lead them to seek treatment for conditions that would not be considered as serious by their black counterparts. The first option could be true for genetic reasons (though the project team is unaware of any evidence on this point) or could be influenced by variations in diet--a more probable factor. Popular belief would also tend to support the thesis that whites have historically had a greater appreciation for the benefits of dental hygiene. This might result from better education (further "mining" of the survey data--not yet completed--may be able to support this) or from other sociological factors, e.g., the fact that poor whites seem somewhat less prone than poor blacks to be concentrated in ghettos, thus having greater exposure to middle-class values of neighbors. With respect to the "threshold of pain" suggestion, some would argue that a larger proportion of the black eligibles are hard core or long term poor; thus they may have had a longer period to adjust to deprivations of all kinds, and they may be generally less troubled by them. This last point may also have explanatory potential for the fact that more whites than blacks cited lack of money as a reason for unmet needs. It may be that white AFDC eligibles are more reluctant to such "charity care" through the auspices of Medicaid than are black eligibles. If, in fact, they have on the average been on the welfare rolls for a shorter period of time, this would not be a terribly surprising finding. If it were true, however, one would also expect that more whites than blacks would be obtaining their care through the auspices of private dentists, and the survey results did produce some evidence to support this point.

Eye/Vision Care

The data that were collected with reference to eye/vision care were generally in line with expectations. Trenton was the only site studied with full benefits for these services. Atlanta had the most limited Medicaid coverage (screening program only available for children to age 6), but it also had the most extensive supplementary benefits available outside the Medicaid program. Table 7-15 displays all of the statistical relationships that will be discussed in this section. Significant differences (p = .0000) were noted between the cities in relation to every one of the seven variables listed for the total AFDC sample. Once again, major differentials existed between adults and children as well as between blacks and whites; in general, the intercity relationships did not vary much between the total samples and the subsets just referred to.

Across all four cities, between two and three times as many adults as children had obtained glasses between January 1, 1972 and the interview date. More whites than blacks had obtained glasses during the period by a clear margin in every subpopulation except one--among AFDC adults in Trenton. The proportion of those who received glasses that incurred out-of-pocket expenses for them ranged from a low of 16.2% in Trenton to a high of 70.5% in Atlanta. In all locations the figure was higher for adults than for children, but the margins varied widely, with the biggest spread existing in Little Rock. Racial patterns were not nearly as clear with reference to payments for glasses. In all locations except Atlanta, more black than white children incurred at least some direct expense for their glasses, with the margin reaching almost two to one in Oklahoma City. Yet among adults, more whites than blacks had such expenses everywhere except in Oklahoma City. In the case of adults, though, the spread between whites and blacks was less than 5% in all locations.

Unmet needs for glasses were also reported most often in Atlanta, but even there it was a problem for only about one in seven eligibles. Again this was a problem that plagued more adults than children in all four locations, but the racial comparisons were not consistent. In two of the four cities (Atlanta and Oklahoma City), more white adults than black reported unmet needs. Note that these are the cities with the highest and lowest proportion of blacks in the total AFDC sample, respectively. Among children, all except Atlanta reported more unmet needs among blacks.

It was mildly surprising to find that despite the fact that Atlanta had the largest proportion of eligibles who reported out-of-pocket payments for glasses as well as the largest proportion with unmet needs, only Trenton had a lower proportion of eligibles who cited lack of money as the reason for not obtaining needed glasses. Again, this was consistently true for a larger proportion of adults than children as well as for more white adults than black adults. Among the children, racial patterns tended to reverse, with more blacks than whites complaining of lack of money in all cities except Atlanta.

Proportionally more whites than blacks had visited an eye doctor during 1972-73 in all subpopulations except among children in Oklahoma City and adults in Trenton, and in all four locations more adults than children reported such

TABLE 7-15. INTERSITE COMPARISONS OF EYE/VISION CARE (PERCENTAGES)--AFDC*

Care	Atlanta	Little Rock	Oklahoma City	Trenton
Obtained glasses after 1/1/72				
Total	7.0	7.7	8.4	22.5
White children	8.3	6.9	8.5	19.1
Black children	4.5	5.4	4.7	17.8
White adults	18.8	20.8	15.9	35.9
Black adults	13.9	14.1	13.3	38.4
Obtained glasses that incurred out-of-pocket expenses for them				
Total	70.5	55.6	60.3	16.2
White children	66.7	20.0	33.3	10.9
Black children	57.7	35.1	61.1	14.5
White adults	83.3	90.0	76.9	23.4
Black adults	81.8	84.6	78.6	21.6
With unmet need for glasses				
Total	14.3	10.8	12.8	4.9
White children	9.6	2.8	7.4	2.4
Black children	8.7	6.7	10.2	3.1
White adult	40.0	22.9	29.5	8.4
Black adults	32.2	28.9	23.3	12.9
Unmet need for glasses who cited lack of money as reason				
Total	53.5	77.5	70.9	13.9
White children	55.6	50.0	52.9	0.0
Black children	47.6	68.1	63.2	4.8
White adults	66.7	100.0	96.2	33.3
Black adults	57.3	84.4	70.8	20.8
Last visited eye doctor in 1972-73				
Total	21.8	26.7	17.4	31.8
White children	28.8	25.9	20.6	32.5
Black children	18.5	26.5	11.3	28.1
White adults	46.9	35.4	26.4	42.0
Black adults	28.4	26.2	25.7	47.8
Unsatisfied need to see eye doctor				
Total	11.8	10.3	12.7	3.0
White children	10.4	4.9	8.1	1.5
Black children	7.7	5.8	9.7	1.9
White adults	34.4	25.0	28.4	4.6
Black adults	23.7	27.5	24.8	6.6
Unmet need to see eye doctor who cited lack of money as reason				
Total	49.5	79.4	64.2	20.9
White children	80.0	71.4	57.9	50.0
Black children	40.7	68.9	55.3	20.0
White adults	54.5	91.7	91.3	40.0
Black adults	54.7	86.7	61.5	19.2

*See footnote to Table 7.2.

visits. Unsatisfied needs for seeing an eye doctor were significantly greater among adults than children in all locations, but racial patterns were less definite. Proportionally more white adults reported unmet needs in Atlanta and Oklahoma City, but among children, more blacks than whites reported a deficiency everywhere except in Atlanta. Lack of money was cited as the reason that the eye doctor was not seen when needed quite frequently, even in Trenton, where Medicaid benefits were available. Differences between cities were significant, as were the racial patterns. In all subpopulations except the adults in Atlanta, more whites than blacks gave this reason for their unmet need. In Atlanta the white/black ratios among adults were almost equal. Though the racial spread was modest among children in Little Rock and Oklahoma City on this point, it became substantial in most other comparisons.

To summarize, intercity differences with respect to eye/vision care were substantial and generally followed a predictable pattern in relation to Medicaid coverage. Consistently more whites than blacks and adults than children obtained glasses/eye care in all locations. Except in Atlanta, proportionally more blacks than whites had unmet needs, but a consistently larger percentage of whites seemed to feel that lack of money represented a barrier to necessary glasses/vision care. It is also, perhaps, worth noting that the racial and age patterns just noted generally differed only in magnitude, not direction, when coverage existed, as in Trenton.

Physician Visits

For the total AFDC sample, the proportion of eligibles without chronic conditions who had had physician contact between January 1, 1973 and the interview date was very similar in all locations except Little Rock. The substantially lower figure there may again, in all likelihood, be traced directly to the serious maldistribution of providers in Little Rock as well as the poor transportation system, which tends to add to the problem. (For this and other comparisons in this section, see Table 7-16.)

As was found for most other services, consistently larger proportions of adults than children had seen a physician in all four cities. Racial differences tended to be rather small in most instances, especially among the children. The same proportions of black and white children had physician contact in Little Rock and Trenton (39.0% and 49.7%, respectively), although the gap between the cities again emphasized the supply/distribution problem in Little Rock. In Atlanta just over 1% more white children (51.1% vs. 49.8%) saw a physician, but in Oklahoma City the spread was dramatic--over 18% (62.2% white, 44.0% black). Among adults, more whites than blacks had physician contact in Little Rock and Oklahoma City, while the situation was reversed in Atlanta and Trenton. The racial differences among adults, however, exceeded 2% only in Little Rock, where 14.2% more whites incurred a physician contact.

It must again be pointed out that the proportions of AFDC eligibles who had phoned or seen a physician during 1973 did not give any support to the substitution hypothesis mentioned previously; that is, there was no consistent pattern in the various subpopulations that suggested a larger proportion who

TABLE 7-16. INTERSITE COMPARISONS OF PHYSICIAN USE (PERCENTAGES)--AFDC*

Use	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles without chronic conditions who had physician contact in 1973				
Total	52.7	40.6	52.7	51.2
White children	51.1	39.0	62.2	49.7
Black children	49.8	39.0	44.0	49.7
White adults	63.2	59.2	63.6	55.3
Black adults	65.2	44.9	62.3	57.0
Chronic patients who usually received injections during office visit				
Total	30.2	33.3	37.6	34.8
White children	41.7	25.0	50.0	20.7
Black children	31.1	32.8	31.3	31.1
White adults	25.0	0.0	46.7	41.5
Black adults	29.1	40.0	28.6	35.6
Chronic patients who usually received a prescription during office visit				
Total	94.2	86.9	90.8	93.4
White children	80.0	85.7	88.2	84.6
Black children	92.4	81.3	88.9	88.7
White adults	100.0	100.0	96.2	100.0
Black adults	95.9	89.2	87.5	93.6
Chronic patients who usually received free sample of medicine during an office visit				
Total	11.5	15.2	13.6	7.5
White children	16.7	25.0	22.7	20.7
Black children	16.0	16.7	6.3	8.9
White adults	16.7	0.0	16.1	5.7
Black adults	8.1	14.7	14.3	5.9
Chronic patients who usually incurred out-of-pocket costs for an office visit				
Total	9.5	18.6	17.1	6.5
White children	8.3	41.7	18.2	3.4
Black children	5.5	8.5	15.6	2.2
White adults	25.0	20.0	22.6	9.4
Black adults	10.4	22.7	10.7	9.3
All eligibles with a regular group of doctors				
Total	40.8	39.4	65.1	63.5
White children	40.4	65.5	74.9	73.0
Black children	37.5	32.5	55.9	61.3
White adults	62.5	64.6	72.4	76.9
Black adults	50.3	48.6	68.6	65.4
Unsatisfied medical need after 1/1/73				
Total	6.0	4.6	6.3	3.0
White children	4.6	2.8	5.4	0.6
Black children	2.9	1.5	2.5	1.3
White adults	28.1	22.9	13.6	9.9
Black adults	14.4	14.1	19.0	6.8
Unmet medical need who cited lack of money as reason for not seeing the doctor				
Total	28.8	73.9	30.9	11.4
White children	50.0	75.0	28.6	0.0
Black children	31.6	80.0	11.1	16.7
White adults	11.1	72.7	63.6	9.1
Black adults	28.3	71.8	25.0	14.3

*See footnote to Table 7.2.

had office visits in Little Rock and Oklahoma City, the two locations which did not provide prescription coverage. Some other differences did show up however. The cities were compared for the proportion of eligibles with chronic conditions who "usually" received injections, prescriptions or free samples of medicines during their visits with physicians. Although the numbers involved in these comparisons are generally small and thus of questionable reliability, they are included as the best available information on a point of considerable policy interest. Little difference was noted with respect to injections ($p = .5183$), and no consistent racial or age pattern existed in this regard. For prescriptions and free samples, however, fairly sharp patterns did emerge. More prescriptions were issued in both Atlanta and Trenton (with coverage) than in Little Rock and Oklahoma City (no coverage), $p = .0251$. In all four locations, more adults than children received prescriptions, and among adults, more whites than blacks did. Among children, more blacks than whites received prescriptions in three locations, Little Rock being the exception. Substantially more free samples were dispensed in Little Rock and Oklahoma City than in the two cities providing prescription benefits ($p = .0000$). In general, children were more likely than adults to get a free sample, and overall, proportionally more whites than blacks benefited from this largesse in all locations except Little Rock--though this racial pattern was less consistent in the adult/child subpopulations. Nevertheless, it seems clear that providers tended to hold back in writing prescriptions in cities where Medicaid did not provide coverage for this benefit, while at the same time being more generous in the distribution of free samples in these same locations.

There were significant differences between locations in the proportions of chronic patients who incurred out-of-pocket costs for their "usual" office visit with a physician ($p = .0001$), and the proportions were two to three times higher in Little Rock and Oklahoma City than in Atlanta and Trenton, though no immediately apparent reason exists for this to be so. In Oklahoma City it could have something to do with the fact that only four physician visits per month are covered by the Medicaid program.

Once again, a consistent pattern of more out-of-pocket costs among whites than blacks was discovered, a relationship that held true in all subpopulations except adults in Little Rock. This exception seems particularly anomalous in light of the huge differential among children in Little Rock (41.7% white, 8.5% black). The latter may be explained at least in part by the earlier observation that poor whites may be less prone than poor blacks to live in ghetto concentrations, thus they may have been concentrated in parts of the city where more physicians were available. Furthermore, assuming for the moment the validity of the earlier observation that proportionally more blacks than whites may be long term or "hard core" poor, it may well be that more whites, as "short term" poor, are reluctant to identify themselves as Medicaid eligibles when seeking treatment by a physician, thus explaining the fairly consistent racial pattern that has been observed with respect to out-of-pocket expenses for most services.

Significant differences ($p = .0000$) existed between cities in the proportion of AFDC eligibles who had a regular doctor/group of doctors. This factor seemed to have a strong racial bias in all locations, so it was not surprising that the highest proportions existed in Oklahoma City and Trenton, respectively, the two locations with the largest proportion of whites in their AFDC samples.

Intercity differences were also significant (p = .0000) for the proportions of eligibles citing an unmet medical need during 1973 and those citing lack of money as the reason for not seeing a physician for their last unmet medical need. Unmet needs were claimed more frequently by whites than blacks everywhere except in Trenton, where the reverse was true. In a mildly unexpected turn of events, more blacks than whites cited lack of money as a barrier to needed medical care except in Oklahoma City, where more whites stated this complaint by more than a two to one margin.

Prescriptions

The possibility of erroneous reporting runs rather high on questions relating to prescriptions, since the event is not as noteworthy to the patient as most other medical events. Yet, although some apparent discrepancies exist between prescription information reported above, in the "Physician" section of the survey instrument, and that reported here, some minor differences in the wording of questions may be the real operative variable.

Among both those eligibles with chronic and nonchronic conditions, Trenton had the highest percentage of new prescriptions written during 1973. Atlanta, however, did not fit the expected mold, ranking only third among the chronic eligibles and a distant fourth among the nonchronic eligibles, despite Medicaid coverage of prescriptions in Georgia. More whites than blacks received new prescriptions in 22 of 24 subpopulations among the chronic and nonchronic eligibles. In general, the racial gap was greatest among children, ranging from about 11% to 25%.

The data behaved more predictably with reference to the filling of prescriptions. Significantly more eligibles filled and refilled all prescriptions in Atlanta and Trenton than in the other two cities (p for chronic = .0433; p for nonchronic = .0053). Surprisingly, Oklahoma City, with its special county-sponsored dispensary, ranked lowest for both chronic (89%) and nonchronic (91%) patients. Racial differences were neither consistent nor particularly pronounced with reference to the acquisition of needed prescriptions

Out-of-pocket expenses were reported by only 4.5% of the eligibles with new prescriptions in Trenton, but over 96% of the corresponding group in Oklahoma City were so involved. The general pattern, again, was for more whites than blacks to have these costs, a relationship that held true in eight out of twelve of the subpopulations displayed in Table 7-17. Three of the four deviations were in Oklahoma City, the location with by far the largest proportion of white AFDC eligibles. As mentioned earlier, it may be that whites are better provided for in Oklahoma City because there are proportionally so many more of them there than in the other cities surveyed. There is no ready explanation as to why over one-third of the eligibles in Atlanta--a city that had full prescription coverage available--incurred out-of-pocket costs.

TABLE 7-17. INTERSITE COMPARISONS OF PRESCRIPTIONS (PERCENTAGE)--AFDC*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
Eligibles with chronic conditions who received new prescriptions after 1/1/73				
Total	67.9	65.7	72.6	83.1
White children	81.8	81.8	85.0	100.0
Black children	56.3	64.4	65.5	77.9
White adults	75.0	81.8	67.7	90.6
Black adults	72.3	61.6	75.0	78.1
Eligibles with chronic conditions who filled all new prescriptions				
Total	94.6	92.4	89.0	96.1
White children	88.9	100.0	100.0	92.3
Black children	100.0	96.6	89.5	98.5
White adults	88.9	77.8	85.7	97.9
Black adults	93.3	91.1	90.5	95.5
Eligibles without chronic conditions who received new prescriptions after 1/1/73				
Total	55.2	63.4	62.0	73.8
White children	64.9	76.2	64.2	76.7
Black children	52.3	60.3	53.4	70.5
White adults	63.6	90.0	74.3	78.0
Black adults	61.0	61.0	71.8	79.9
Eligibles without chronic conditions who filled all new prescriptions				
Total	94.1	92.3	91.0	96.3
White children	95.8	100.0	92.1	95.7
Black children	95.1	93.8	93.5	96.3
White adults	100.0	88.9	88.5	100.0
Black adults	90.7	83.0	82.1	97.6
All eligibles with new prescriptions who had out-of-pocket expense				
Total	33.7	85.6	96.1	4.5
White children	44.3	84.9	96.9	4.9
Black children	28.0	82.2	97.2	2.7
White adults	73.3	90.9	96.6	8.3
Black adults	42.2	93.7	97.9	7.7
All eligibles using nonprescription medicines who were doing so on the recommendation of a physician				
Total	10.9	5.7	19.7	13.8
White children	21.4	13.8	18.1	20.5
Black children	9.3	3.8	22.0	11.9
White adults	26.1	15.8	15.1	17.9
Black adults	10.4	6.6	13.3	11.1

*See footnote to Table 7.2.

TABLE 7-18. INTERSITE COMPARISONS--FAMILY GROWTH AND PLANNING (PERCENTAGE)--AFDC*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
Those who had been mothers within last 5 years who plan to have more children				
Total	13.9	10.5	23.1	13.4
White children	20.0	0.0	28.6	50.0
Black children	30.4	13.6	30.0	23.9
White adults	15.4	16.7	26.2	10.2
Black adults	7.7	8.8	16.1	11.1
All females 13-50 who received professional birth control advice				
Total	62.7	50.8	51.6	52.6
White children	40.9	23.1	26.7	16.7
Black children	49.0	37.3	34.9	36.2
White adults	68.0	50.0	52.6	52.2
Black adults	71.2	61.6	72.9	66.1
Those who received birth control advice that paid out-of-pocket for it				
Total	7.1	3.9	29.4	19.2
White children	12.5	0.0	12.5	0.0
Black children	4.1	1.6	22.7	9.5
White adults	23.5	15.8	34.1	28.1
Black adults	7.0	3.4	32.4	19.6
Females 13-50 with unsatisfied desire for birth control information				
Total	2.3	2.2	4.3	1.4
White children	0.0	0.0	0.0	0.0
Black children	2.5	1.2	3.2	1.1
White adults	0.0	2.5	7.7	1.8
Black adults	2.5	2.9	3.1	1.8

*See footnote to Table 7.2.

A simple effort was made to note the effect of prescription coverage on the use of nonprescription medicine. It was found that of those using nonprescription medicines at the time of the survey, Oklahoma City had the largest group (19.7%) who were doing so at the suggestion of a physician. This, then, may partially explain and compensate for the earlier finding that Oklahoma City had the lowest proportion of eligibles filling all new prescriptions as needed. One would have expected Little Rock, without Medicaid prescription benefits available, to also have a large proportion of eligibles using nonprescription medicines on a physician's recommendation. Not true. Less than 6% of the Little Rock AFDC eligibles reported this situation, by far the lowest of the four cities studied. Once again, except for two of the Oklahoma City subpopulations, consistently more whites than blacks had been directed to their nonprescription medicine by a physician.

Family Growth and Planning

Intercity variations with respect to the proportion of mothers who expected to have more children were significant, p = .0140. Overall, proportionally

TABLE 7-19. INTERSITE COMPARISONS OF HEALTH STATUS AND HEALTH SERVICES (PERCENTAGE)--AFDC*

Description	Atlanta	Little Rock	Oklahoma City	Trenton
AFDC eligibles rating health as "poor"				
Total	5.7	5.7	7.1	5.1
White**	9.2	14.6	9.2	7.1
Black**	5.5	4.5	5.9	5.0
Rating available health services as "poor"				
Total	3.6	6.4	7.9	1.6
White**	6.4	4.3	9.8	0.2
Black**	3.4	6.7	7.3	2.0
Citing prescription coverage as desired additional service				
Total	1.9	25.7	28.7	2.8
White**	1.5	32.8	26.5	1.6
Black**	1.9	24.7	29.1	3.2
Citing dental care as desired additional service				
Total	26.3	11.1	28.1	1.3
White**	40.2	21.3	43.9	2.7
Black**	25.1	9.4	17.0	0.9
Citing eye/vision care as desired additional service				
Total	11.4	6.4	14.5	0.3
White**	17.4	9.2	20.1	1.6
Black**	10.9	6.0	11.3	0.0

*See footnote to Table 7.2.

**Since this question was typically answered by the head of the household for all case numbers, only minor variations existed between adults and children. For this reason, they have not been displayed separately in this table.

more whites than blacks predicted more family to come. (Table 7-18 contains data for this section.) It was also interesting to note that more blacks than whites and adults than children had received professional birth control advice. Intercity differences were again significant (p = .0001) with the largest proportion (62.7%) getting help in Atlanta. Extensive extra-Medicaid programs in that city probably account for most of the differential between it and the other three locations (50.8%-52.6%). Despite the fact that proportionally more blacks than whites had already received birth control advice, more blacks also felt they had an unsatisfied need for such information in all sites except Oklahoma City. As has become somewhat familiar, a larger percentage of whites than blacks incurred out-of-pocket costs for their birth control advice.

Rating of Health Status and Services

The self-rated health status of eligibles varied somewhat by site, but the significance level was modest, p = .1890; therefore, despite the fact that the proportion who reported their health as "poor" progressed from a low of

5.1% in Trenton, with the best Medicaid program, to a high of 7.1% in Oklahoma City, with the weakest Medicaid program among the sites studied, it would be somewhat presumptuous to claim a causal relationship. Nevertheless, it was again quite clear that more whites than blacks and more adults than children rated their health as poor. (See Table 7-19 for this section.)

In terms of the rating of available health services, the intercity differences were significant, p = .0000, and in this case the ratings followed even more clearly the study team's ranking of Medicaid programs. Poor ratings of available health services were reported by 1.6% of the eligibles in Trenton, 3.6% in Atlanta, 6.4% in Little Rock and 7.9% in Oklahoma City. In terms of Medicaid program benefits, the research group had ranked the cities--from best to worst--as Trenton, Atlanta, Little Rock and Oklahoma City. Interestingly, racial and age patterns were quite mixed in the ranking of health services.

Table 7-19 also shows some figures on the proportion of eligibles citing a desire for the addition of three primary optional services. Not surprisingly, intercity differences are substantial (p = .0000) for all three services and generally consistent with the pattern of already existing benefits. Coverage of prescription drugs and dental care received considerably more support among AFDC eligibles than did eye/vision care. This could be a useful guide in establishing priorities for broader future coverages under Medicaid or any other national program.

Overall, the intercity comparisons among AFDC eligibles tended to conform with those found among both the AD and OAA. The overall evidence was conclusive in showing that Trenton, with its comprehensive Medicaid program, consistently outperformed the more limited programs in the other sites.

CHAPTER 8

THE ARKANSAS E.H.S.D.S. HEALTH SURVEY

Introduction

Early in the project, it was learned that DHEW-NCHS was sponsoring so-called "Experimental Health Services Delivery Systems" in a number of states and communities throughout the country. In keeping with the federal guidelines, many of these projects were undertaking health surveys in order to establish a baseline against which the impact of certain proposed changes could be measured. One such project encompassed the entire state of Arkansas, a heavily rural state in which, as already noted (Chapter 4), Medicaid coverage is rather limited. This presented an opportunity to negotiate the addition of a few questions to their survey, in order to acquire some information on the rural population. The local sponsor, the Arkansas Health Systems Foundation, was receptive to this proposal and, as a result, several questions pertaining to the noncovered optional services were added to their instrument. (A copy of this instrument is to be found in Appendix A.)

Methodology

A copy of the proposed sampling plan was reviewed. Essentially, the design employed multistage, cluster sampling, with the household constituting the basic sampling unit. The design was developed with a view toward obtaining a representative, probability-based sample of all Arkansas households in a manner proportional to the state's geographic and demographic population distributions. Throughout most of the state, the target sampling rate was two-thirds percent (.0067), with the slightly higher rate of 1 percent (.01) in the two most sparsely populated of the state's eight health districts.

The nucleus of the survey instrument was designed by the federal sponsors, with some flexibility permitted for local modification. It comprised a number of questions relating to the use and need for a variety of health care services, including inpatient hospital care, ambulatory services, dental care, vision services and prescriptions. In the section on health insurance, there was a question on Medicaid eligibility status. The coded-keypunched data was supplied to us for those individuals who were reported to be eligible to receive health benefits under Medicaid. (As in the major survey, the term "eligible" refers only to individuals who were covered by Medicaid at the time of the interview; specifically, it excludes individuals who may have met the state eligibility criteria but who never applied for eligibility status.) Due to the rather strict confidentiality provisions stipulated in the federal guidelines, the responses to this question could not be verified against the Arkansas Medicaid eligibility list. For this reason, the substantial suggested underreporting problem, examined below, could not be resolved in a satisfactory manner.

The field work was undertaken in Spring 1973, by Hooper Holmes, Inc., a national market research firm. The raw data was coded, keypunched, tabulated, and analyzed by the Arkansas Health Statistics Center, working in close cooperation with the local sponsor.

Results

The Underreporting Problem

The Arkansas Health Survey collected and processed data on 12,556 individuals spread throughout the state. In each of the six health districts, the response rate was 85% or better.* However, a comparison of the sample proportion of Medicaid eligibles and the corresponding population proportion revealed what appeared to be a major underreporting problem. While the technical details of this problem are presented in Appendix B, its overall dimensions are outlined below.

According to 1970 census figures, the population of Arkansas is approximately 2,000,000 of which state records show roughly 150,000 to be recipients of public assistance and, hence, by definition eligible for Medicaid. Thus, the population proportion of Medicaid eligibles is approximately 7.5%. Of the 12,556 respondents, only 511 (3.6%) claimed Medicaid eligibility, thereby suggesting an underreporting problem of roughly 50%. Furthermore, an analysis based on households strongly supports this suggested underreporting.

Several hypotheses were entertained as possible explanations of the suspected underreporting. However, subsequent correspondence with the Arkansas Health Statistics Center led to the conclusion that none of these hypotheses were strongly substantiated by the data. For example, it was thought that many Medicaid eligibles may have confused this program with Medicare and answered "yes" when asked whether they were covered under the latter. A simple test determining whether a sizable proportion of respondents under age 65 indicated Medicare eligibility revealed that there was little basis for this conjecture. Another possibility was that the underreporting might be attributable to the oversampling in the two most sparsely populated health districts, where apparently there was a rather widespread reluctance to admit that one was on "welfare." However, it was quickly determined that the oversampling was too small to account for any substantial part of the underreporting.

In all likelihood, the underreporting was simply a result of either outright ignorance of one's eligibility (an unlikely result in light of our own findings in the main survey)** or failure to recognize the program by name. There is some evidence that the problem was most acute among the black, AFDC population. Of the 260 sample Medicaid households, only 84 (32.3%) were black, a surprisingly low percentage. Furthermore, the age distribution of the sample reveals that almost half (48.5%) of the 511 individuals were 65 years of age or older, thereby suggesting an overrepresentation of the OAA and a concomitant underrepresentation of the AFDC.

---

*Arkansas Health Statistics Center, Technical Report No. 4, May 1974.

**In the main study, we found that the vast majority of eligibles were aware of their eligibility and were not reluctant to acknowledge it. Of course, in the main study, certain aids were used, e.g., showing the respondent a Medicaid card. To the best of our knowledge, such aids were not used here.

This suggested underreporting creates at least two sources of possible bias. The likely overrepresentation in the sample of the elderly recipients implies that the utilization and unmet need estimators are probably upwardly biased. Secondly, the likely underrepresentation of blacks may result in some of the estimators, e.g., utilization of dental services, likewise to be upwardly biased. The underlying difficulty, of course, stems from not knowing whether those who failed to report their eligibility were ignorant of their benefits and had different health care patterns as a result. It is unfortunate that the confidentiality provisions were so restrictive as to preclude fellow researchers from more carefully scrutinizing the data. Serious consideration was given to simply disregarding the Arkansas Health Survey in light of the inability to satisfactorily resolve this problem. However, it was finally reasoned that to ignore the best available source of information on the rural population would be prodigal. It was hoped that the main survey was correct in suggesting that the underreporting was due more to failure to recognize the program by name than to lack of awareness of eligibility. This would tend to mitigate the probability of substantially different health care patterns between those who reported and those who did not report eligibility. However, the likely bias toward whites and the elderly remains and should be borne in mind as one analyzes the results described below.

Demographic Characteristics

Of the 511 reported eligibles, 226 (44%) were black and 285 (56%) were white. Approximately three-fifths of the sample was female, with the urban/rural composition being roughly 47%/53%.* Less than one-fourth of the eligibles lived in Standard Metropolitan Statistical Areas (SMSAs). Black families were fairly evenly divided between urban and rural locations, while a slight majority (59%) of white families lived in rural areas. Blacks and whites also evinced somewhat different mean family sizes, respectively 3.6 and 2.3. These relatively small mean family sizes are probably attributable to the underrepresentation of the AFDC category. As mentioned earlier, 48.5% of the sample was 65 years of age or older.

An examination of the family income question raises some questions about the income homogeneity of this group, i.e., of the quality of the sample. Almost 20% of these reported Medicaid eligibles claimed incomes in excess of $5,000, some as high as $15-25,000. Needless to say, such incomes exceed the maximum allowable income under Arkansas Medicaid. It is conceivable, then, that these individuals are not Medicaid eligibles. Perhaps a more likely explanation is that they were dissembling, a fairly common occurrence in income questions. For this reason, they were not removed from the substantive analysis.

---

*For the most part, rural areas consisted of towns, villages, and boroughs with a population under 2,500.

TABLE 8-1. HOSPITALIZATION: ARKANSAS HEALTH SURVEY

	Urban			Rural		
	Total	SMSA	Non-SMSA	Total	SMSA	Non-SMSA
% Hospitalized in past 12 months	18.3	17.8	18.5	19.3	28.6	18.9
Mean, total number of inpatient days*	14.7	11.9	15.8	15.3	8.4	16.4

*Computed over those who had been hospitalized.

Hospitalization and Emergency Medical Care*

Table 8-1 summarizes the hospitalization and emergency medical care data. Thus, roughly 19% of the eligibles reported at least one incident of inpatient hospital care in the previous year. Two-thirds of these eligibles had been hospitalized on only one occasion. Among those hospitalized, the mean total number of inpatient days was roughly 15.0. Again, the surprisingly high proportion who reported an incident of hospitalization probably reflects the overrepresentation of the elderly.

Almost three-fourths (73.6%) of the eligibles living in multiple person families indicated that their family had never discussed what it would do in case of a medical emergency. Approximately 45% of the eligibles reported that they did not have any information on whom to contact in a medical emergency. Less than 16% of the eligibles lived in a family wherein, at one time or another, someone had taken a first-aid or medical self-help course.

The majority (68.3%) of eligibles lived in communities which had an ambulance service, while 21.1% did not and 10.6% did not know. Not surprisingly, the hospital served as the principal source of emergency care, being cited by 76.1% of the eligibles. Thirteen percent cited a physician's office in this context, while 4.3% did not know where they would go in the event of a medical emergency. Seventeen percent indicated that it would take them at least 30 minutes to reach their source of emergency care.

Physician Services and Prescriptions

As shown in Table 8-2, of the 476 who answered the pertinent question, approximately 72% had contacted a physician within the previous year. The mean number of visits, surprisingly enough, was much higher among the rural

---

*It is important to note that all survey results in this chapter are based on the same 12-month recall period. Direct comparisons with data from the main study which appear in Chapters 3-7, then, are difficult. For the most part, the main study dealt with recall periods that ranged from 6 up to 18 or 20 months. The rationale, there, was that eligibles might have better recall in terms of calendar year sequences.

TABLE 8-2. PHYSICIAN SERVICES: ARKANSAS HEALTH SURVEY

	Urban			Rural		
	Total	SMSA	Non-SMSA	Total	SMSA	Non-SMSA
% contacted a physician in past 12 months	68.6	75.3	65.3	70.4	73.5	69.9
Mean number of physician contacts in past 12 months*	3.40	3.78	3.22	5.40	5.44	5.39
% had an unmet need to see	16.9	11.4	19.6	21.9	27.8	21.0

*The mean is computed over all the eligibles, not just those who had seen a physician.

eligibles--5.4 vs. 3.4. On the other hand, a smaller proportion of urban eligibles had experienced an unmet need to see a physician in the past twelve months--16.9% vs. 21.9%. Among the urban eligibles who had such an unmet need, a lack of money was the principal barrier (45.0%), while among their rural counterparts, lack of transportation was the most frequently cited (34.5%) obstacle. Lack of money is, of course, a curious response for a covered service and may, perhaps, indicate either ineligibility at the time of the unmet need, ignorance of benefits, or use of a nonparticipating doctor.

In urban and rural areas both, the major source of primary care was the physician's office--68.2% among the urban eligibles and 78.4% among the rural eligibles. Clinic type facilities ranked second (12.3%) among the rural group, while among their urban counterparts, the hospital emergency room/clinic emerged second (18.2%). In the urban-SMSA group, the hospital was the usual source of care for 44.3% of the eligibles. Not surprisingly, the rural eligibles reported a slightly higher average length of time to reach their usual source of care--30.4 vs. 21.7 minutes. Interestingly enough, among the urban group, the non-SMSA eligibles had quicker accessibility than the SMSA eligibles (26.0 vs. 19.7 minutes), while among the rural group, the SMSA eligibles had quicker accessibility (31.7 vs. 21.4 minutes).

Approximately 22% of the eligibles had received a prescription within the previous three months. Of these, 20.5% indicated that they had failed to fill or refill at least one of these prescriptions. In comparison with the results of the main study, this percentage seems rather high; this may well be attributable to the likely bias toward the elderly discussed earlier. Of the 275 prescriptions issued, 61 (22.2%) were not filled. Lack of money was by far the preponderant obstacle, being cited by 20 of the 23 eligibles who failed to fill and refill all their prescriptions. These results are consistent with the fact that, at that time, prescriptions were not covered in Arkansas.

TABLE 8-3. DENTAL SERVICES: ARKANSAS HEALTH SURVEY

	Urban			Rural		
	Total	SMSA	Non-SMSA	Total	SMSA	Non-SMSA
% that saw a dentist in the past 12 months	23.1	16.5	26.4	20.4	8.3	22.3
Mean number of visits*	.47	.33	.54	.41	.17	.44

*Computed over all the eligibles.

Dental and Vision Care Services

Approximately 22% of the eligibles had seen a dentist within the previous twelve months, with a much higher percentage among the non-SMSA eligibles in urban and rural areas both. It is likely that this finding reflects a SMSA concentration of elderly and blacks, two groups which tend to have a relatively low utilization of dental services.

Roughly one-fifth of the eligibles claimed that they had experienced an unmet dental need within the previous twelve months--23.0% in non-SMSAs and 9.6% in SMSAs. This difference may well be due to transportation factors as well as to the above-mentioned differences in population composition. Approximately 11% of the non-SMSA eligibles who had such an unmet need attributed it to a lack of transportation. Money was the most frequently cited barrier among both non-SMSA (56.0%) and SMSA eligibles (81.8%), but none of the eleven SMSA eligibles cited transportation. Again, lack of money is a curious response, since dental care was generally covered.

TABLE 8-4. VISION CARE SERVICES: ARKANSAS HEALTH SURVEY

	Urban			Rural		
	Total	SMSA	Non-SMSA	Total	SMSA	Non-SMSA
% that saw an eye doctor in past 12 months	16.6	11.5	19.0	21.9	20.0	22.2
Mean number of visits*	.24	.27	.23	.35	.26	.36

*Computed over all the eligibles.

Approximately one-fifth of the eligibles had seen an eye doctor in the previous twelve months--21.2% among non-SMSA eligibles and 14.8% among SMSA eligibles. Again, the reasons for this difference are not clear, but it is suspected that it reflects underlying differences in the demographic composition of the two groups.

Of the eligibles who had seen an eye doctor, roughly two-thirds indicated that the doctor had prescribed glasses. The vast majority (88%) obtained the prescribed glasses, with little variation by SMSA, non-SMSA residence. The only factor cited for not obtaining the glasses was lack of money, a not particularly surprising finding given the lack of general coverage for glasses under Arkansas Medicaid.

Summary

In light of the apparently serious underreporting in this study, caution is necessary in drawing firm conclusions. On the other hand, a number of apparently significant differences do appear to exist between urban and rural Medicaid eligibles in their use of various health care services. Not all of these differences were consistent with the initial expectation that use of and knowledge about Medicaid services would be greater in urban areas. This suggests that further investigation in this area would be fruitful.

CHAPTER 9

COUNTY WELFARE ADMINISTRATORS' SURVEY

Introduction

Early in the project, it became clear that the resources necessary to undertake a large-scale, national or regional survey of Medicaid eligibles were not available. However, in the hope of gaining some limited information on geographical areas outside of the main study, the "County Welfare Administrators' Survey" was used to obtain some insights into the impact of the noncoverage of optional services on the Medicaid eligibles in roughly twenty states that had a rather limited coverage of these services. It was hoped that this survey would serve as a basis for comparison with the main survey and, if similar results emerged, it might provide a basis for the cautious drawing of geographically wider inferences from the latter.

Methodology

In designing this survey, two of the principal questions were how it should be administered and to whom it should be directed. Regarding the method of administration, budget constraints were such that a mail survey was the only type feasible. With respect to the group to be surveyed, one possibility, of course, was the eligibles themselves. While this would have yielded first-hand information and permitted a ready comparison with the main survey, it unfortunately appeared to be too costly. It was reasoned that the county welfare administrator (or one of his assistants) would have a fair appreciation of the health care needs of his clients through feedback from his caseworkers. In each of our presurvey site visits, we were impressed with the familiarity of these local officials with the health care resources in their respective communities and with the problems their clients encountered in meeting their health needs.

The questionnaire was customized to each particular state's benefits package, so that questions were asked pertaining only to the optionals not covered in the state. The optionals upon which this survey focused were the following: routine dental care, orthodontia, dentures, eyeglasses, optometric services, and prescription drugs. For each uncovered optional, the county welfare administrator was asked essentially four questions: (1) the name and sponsor of whatever supplemental programs existed in his county which provided the uncovered service at little or no cost to the indigent; (2) the relative accessibility (on a four-point scale) of the service to adult eligibles and, if the service was inaccessible, the reason for the inaccessibility; (3) the relative accessibility (on a four-point scale) of the service to children eligibles and, if the service was inaccessible, the reasons for the inaccessibility; and (4) his sense of priorities with respect to the addition of the uncovered optionals to the state's Medicaid package. A copy of the questionnaire (along with the accompanying cover letter) that was sent to the counties in Oklahoma (where few, if any, of the optionals were covered) is presented in Appendix A.

TABLE 9-1. COUNTY WELFARE SURVEY RESPONSE RATES, BY STATE

State	Target Number of Counties	Respondents	Response Rate (Percent)
Alabama	30	18	60.0
Arkansas	16	6	37.5
Colorado	9	6	66.7
Delaware	3	3	100.0
Florida	28	19	67.9
Georgia	26	18	69.2
Idaho	6	3	50.0
Kentucky	19	16	84.2
Louisiana	25	21	84.0
Maine	10	1	10.0
Missouri	7	6	85.7
Oklahoma	16	12	80.0
Tennessee	21	17	81.0
Texas	35	14	40.0
South Carolina	28	16	57.1
South Dakota	3	2	66.7
Virginia	32	25	78.1
Vermont	10	7	70.0
Washington, D.C.	1	1	100.0
Wyoming	10	7	70.0
Total	335	218	65.1

Two criteria were used to select counties for the study: (1) the county was located in a state which did not cover one or more of the above-listed optional services; and (2) the county had a minimum population of 30,000 individuals. It was thought that counties under 30,000 would be primarily rural and that the accessibility of health care services would be worse due to the shortage of providers in rural areas. But here, the interest was primarily in determining the impact of noncoverage (the failure to remove the financial barrier), not that of a shortage of providers. Lest this become a confounding factor, it was decided to survey, for the most part, only counties with populations of 30,000 or more. In several states, e.g., Wyoming, where there were few, if any, counties of this size, this second criterion was relaxed. A questionnaire was sent to all counties which met these criteria. The initial survey was mailed in September 1973 with a follow-up in November.

TABLE 9-2. COUNTY WELFARE SURVEY RESPONSE RATES BY TYPE OF SERVICE

Type of Service	Target Number of Counties	Respondents	Response Rate (Percent)
Routine dental care	293	190	64.8
Orthodontia	319	212	66.5
Dentures	309	204	66.0
Eyeglasses	259	171	66.0
Optometric services	224	157	70.1
Prescriptions	45	27	60.0

TABLE 9-3. COUNTY WELFARE SURVEY FREQUENCY OF SUPPLEMENTAL PROGRAMS, BY SERVICE

Program	Absolute Frequency (counties)	Percentage of Relative Frequency
Dental		
None	76	35.8
One	68	32.0
Two	34	16.0
Three	18	8.5
Four or more	16	7.5
Total	212	100.0
Eye Examination		
None	30	17.5
One	66	38.6
Two	47	27.5
Three	11	6.4
Four or more	17	9.9
Total	171	100.0
Eyeglass		
None	15	8.8
One	58	33.9
Two	60	35.1
Three	20	11.7
Four or more	18	10.5
Total	171	100.0
Prescription Drug		
None	8	29.6
One	12	44.4
Two	1	3.7
Three	6	22.3
Total	27	100.0

Results

Questionnaires were mailed to 335 counties in nineteen states and the District of Columbia. There were initially 159 respondents, but the follow-up generated an additional 59, for an overall response rate of 65.1%. Table 9-1 cross-tabulates these respondents by state; Table 9-2, by type of service.

Supplemental Programs

As shown in Table 9-3, depending upon the service, between 64.2% and 91.2% of the counties listed at least one supplemental program for the particular uncovered optional. However, with the exception of eyeglasses, the majority of counties did not have more than one supplemental program for any specific service. Depending upon the demographic composition of the eligibles, the geographic spread of the county, the availability of transportation, and the resources and magnitude of the program, it is unlikely that one supplemental program would be sufficient to provide reasonable accessibility for the service. Furthermore, in many counties, the only cited program was a

TABLE 9-4. COUNTY WELFARE SURVEY PROPORTION OF COUNTIES THAT HAVE A SUPPLEMENTAL PROGRAM, BY SERVICE AND SPONSOR (PERCENTAGE)

Sponsor/service	Dental	Eye Examinations	Eyeglasses	Prescriptions
Federal government	17.4	10.5	7.0	7.1
State government	35.2	32.0	31.5	14.8
County and local government	28.2	20.9	12.7	59.3
Private	17.9	63.4	86.0	22.2
Other	6.1	1.7	1.7	0.0

state-administered vocational rehabilitation or unemployment program, under which services are provided only if they render the individual employable. This was particularly true for dental care, where approximately one-fourth of the counties that had a dental program listed only a vocational rehabilitation or unemployment program.

In Table 9-4, the supplemental programs are classified by sponsor. Thus, in dental care, the principal sponsor was the state government; for the most part its participation did not go beyond the limited vocational rehabilitation and unemployment programs. Twenty-eight percent of the counties provided some form of dental coverage themselves, while approximately 18% listed a privately sponsored program. Roughly one-sixth cited a federal dental program in their county, largely Model Cities, OEO Children and Youth, and specially funded school programs.

The vast majority of counties appeared to be relying upon the private sector to provide eye care to the indigent. In 86% of the counties, eyeglasses were provided under some type of private, eleemosynary program; eye examinations were available in 63% of the counties. By far, the most frequently named operation was that of the Lions Club. However, despite their rather widespread supplementation, eye care services did not appear to be particularly accessible, especially to adults. (See Table 9-5.) Thus, these supplemental programs did not seem to be at all adequately financed, a point that was frequently adduced in our three site visits for the main survey. In this respect, Atlanta, Little Rock, and Oklahoma City appeared to be fairly typical.

Almost three-fifths of the counties sponsored some form of prescription program, the second most frequently mentioned type of sponsor being voluntary agencies.

Accessibility

An examination of Table 9-5 reveals that, with the exception of prescriptions, the children enjoyed a much higher level of accessibility than the adults for each service. This finding accords with the results of the main survey. This children/adult differential is not particularly

TABLE 9-5. ACCESSIBILITY RATINGS, FOR ADULTS AND CHILDREN (PERCENTAGE)

Service/Level of Accessibility	"N"*	Very Accessible	Fairly Accessible	Somewhat Inaccessible	Very Inaccessible
Routine dental care					
Adults	171	4.1	11.7	24.6	59.6
Children	169	38.5	29.6	19.5	12.4
Orthodontia					
Children	188	6.9	12.8	18.6	61.7
Dentures					
Adults	193	1.0	8.3	22.3	68.4
Eyeglasses					
Adults	163	9.8	32.5	30.1	27.1
Children	160	48.1	33.7	11.6	6.3
Eye Examinations					
Adults	144	18.0	30.6	27.1	24.3
Children	146	52.7	28.8	10.3	8.2
Prescriptions					
Adults	24	39.1	26.1	13.0	21.7
Children	24	37.5	25.0	16.7	20.8

*"N" indicates the number of respondents who answered the particular accessibility question.

surprising in light of the fairly widespread implementation of the Medicaid screening program, under which children up to a certain age (varying by state) undergo a comprehensive screening and frequently, if not always, receive follow-up care at little or no cost. Also, it is suspected that many supplemental programs, e.g., school health programs and Lions Clubs, still have children as their primary target population. (During our site visits under the main survey, however, we were informed that, in response to the fairly adequate coverage of children under the screening program, some of the Lions Clubs are now emphasizing adult care.)

Among the adults, observe that dentures are the least accessible service (as measured by the percentage of counties in which they were rated somewhat--or very inaccessible). In over 90% of the responding counties, dentures were rated inaccessible, with routine dental services representing a close second at 84%. Eye care appeared somewhat more accessible, with respectively 51% and 57% rating eye examinations and eyeglasses inaccessible to adults. At 37.5%, prescriptions were, by far, the most accessible service to adults, a not particularly surprising finding given the fact that over 70% of the counties provided some form of supplemental program for prescriptions. Apparently, the feeling among the county welfare administrators is that these programs have been fairly successful in assisting the eligibles to fill their prescriptions. This finding, too, is fairly consistent with the results from the main survey in Little Rock and Oklahoma City, the two files where Medicaid did not cover prescriptions.

TABLE 9-6. COUNTY WELFARE SURVEY: REASONS FOR INACCESSIBILITY FOR ADULTS AND CHILDREN (PERCENTAGE)

Service/Reasons	Lack of Medicaid Coverage	Shortage of Providers	Lack of Transportation	Other
Routine dental				
Adults	94.3	21.1	22.5	23.2
Children	59.3	37.0	20.4	29.6
Orthodontia				
Children	83.4	25.8	13.3	15.9
Dentures				
Adults	94.8	16.6	16.0	13.1
Eyeglasses				
Adults	96.8	20.2	10.6	9.6
Children	86.2	34.5	13.8	17.2
Eye examinations				
Adults	91.9	18.9	21.6	12.2
Children	66.7	18.5	18.5	29.6
Prescriptions				
Adults	88.9	11.1	11.1	11.1
Children	88.9	11.1	11.1	0.0

Among the children, by far the most inaccessible service was orthodontia, with over 80% of the counties rating it somewhat--or very inaccessible. Prescriptions were purported to be inaccessible to the children in roughly 37.5% of the counties, followed by routine dental care at 32%. Eye care was the most accessible benefit to children, with only roughly 18% each viewing eye examinations and glasses as inaccessible.

As shown in Table 9-6, for each service, the most frequently cited explanation for an inaccessible rating was the lack of Medicaid coverage. Given the screening program, it is not surprising that this factor was more prevalent among the adults for each service except prescriptions. A shortage of providers was generally the second most frequently cited explanation of inaccessibility. This factor is augmented by the fact that many of the "other" response indicated a lack of providers who were willing to participate in Medicaid.

Priorities

A certain amount of caution must be exercised in interpreting Table 9-7. Since the priority questions were asked only of those services not then covered in the respective states' Medicaid programs, a third ranking would not have the same meaning in a county where six services were ranked as in a county where, say, only three were ranked. Nevertheless, Table 9-7 does reveal some important findings. Prescriptions were considered the most

TABLE 9-7. COUNTY WELFARE SURVEY: PRIORITIES OF SERVICES (PERCENTAGES)

Service/Ranking	"N"*	First	Second	Third	Fourth	Fifth	Sixth
Routine dental	159	62.3	13.2	16.4	6.3	1.9	0.0
Orthodontia	178	5.1	15.2	30.3	18.0	29.2	2.2
Dentures	184	16.3	37.5	17.4	17.9	10.3	0.5
Eyeglasses	154	18.2	31.2	27.3	17.5	5.8	0.0
Optometric	134	12.7	25.4	25.4	23.9	12.7	0.0
Prescriptions	24	83.3	8.3	4.2	4.2	0.0	0.0

*"N" indicates the number of respondents who answered the priority question for each particular service.

urgent priority in over four-fifths of the counties where they were not covered by Medicaid. This probably reflects the perceived medical importance of prescriptions rather than their accessibility relative to other uncovered services. Recall from Table 9-5 that, among adults, prescriptions were the most accessible service and that, among children, they were more accessible than orthodontia. Recall also that the majority (70%) of counties had at least one supplemental program for prescriptions. That prescriptions would still be considered the most urgent priority probably reflects a perceived inadequacy of such supplemental programs by the county welfare administrators. It also probably reflects the relative frequency with which eligibles encounter a need for this particular service, though results both of this and the main survey suggest that relatively few eligibles are unable to fill their prescriptions.

Routine dental services followed prescriptions, being cited by 62.3% as the most needed addition. Eye care services are generally considered to be of less urgent priority than dental services, a finding which is consistent with their differential accessibility among both children and adults (see Table 9-5). Also, as indicated in Tables 9-3 and 9-4, eyeglasses and optometric services tended to have somewhat more extensive supplemental coverage, particularly through the network of Lions Clubs and other eleemosynary sponsors.

In general, dentures and orthodontia had, respectively, the next to the lowest and the lowest priorities. This is probably attributable to the comparatively low incidence of need for these services among the Medicaid population (although dentures are fairly common among the elderly, and this probably accounts for their generally being ranked higher than orthodontia services).

Summary and Conclusions

The vast majority of counties had at least one supplemental program for the services not covered by Medicaid. State and local governments were the principal sponsors of dental programs; eleemosynary agencies, of the eye care programs; and, local governments, of prescription programs. However in the view of the county welfare administrators, these programs had not been very successful in filling the gap in Medicaid coverage, particularly for adults. For every service except prescriptions (where, incidentally, the screening program would not have any impact), children were deemed to have significantly better access than adults. This finding, which certainly supports the results of the main survey, probably manifests the perceived effects of the screening program and certain supplemental programs (e.g., school clinics) which have children as their primary target. Among the adults, prescriptions were the most accessible service, followed, respectively, by optometric care, eyeglasses, routine dental care, and dentures. Among the children, optometric services and eyeglasses were the most accessible, followed by routine dental care, prescriptions, and orthodontia.

Prescriptions were considered the most urgent addition in over four-fifths of the counties where they were not included in the Medicaid benefits package. Routine dental services and eye care services were, respectively, second and third, while dentures and orthodontia received the lowest priorities.

CHAPTER 10

THE PHYSICIAN SURVEY

Introduction

The purpose of the physician survey was to determine how physicians respond or react to a lack of Medicaid coverage for prescribed medications. At the time of the survey (fall 1973), several states had not provided coverage of prescriptions for categorically needy welfare recipients. Many other states, while providing such coverage for the categorically needy, omitted it for the medically needy. Furthermore, it had been proposed in some quarters that prescription coverage be omitted from any national health insurance package, whether for the poor or the American public in general.

Given this background, it was considered important to determine whether the poor were generally able to fill their prescriptions in situations where the often sizable financial barrier had not been removed by Medicaid or some other government program. In the main survey, two of the four local areas studied (Little Rock and Oklahoma City) had Medicaid programs that did not cover prescriptions, and it was possible to draw some tentative inferences on how this affected the ability of Medicaid eligibles to obtain medication. Previous studies, however, have suggested that physician behavior in response to insurance type benefits, especially as they relate to the poor, may be at least as important a variable as basic consumer behavior in determining the final outcome. (e.g., Hall et al. The Effects of Cost-Sharing in the Medicaid Program, final report to SRS on contract number 18P-56651/3-01, December 1973, pp. 12-15.)

Thus, it was decided that a survey of physicians, as a complement to the main survey, might yield some interesting insights with respect to the effect of noncoverage on patients and the responses of providers to the gap in coverage. For example, SRS was concerned with the question, "Does failure to cover prescriptions have the potentially perverse result of increasing Medicaid program costs?" This could come about in at least two different ways. First, a physician could recommend more frequent office visits for a patient needing regular medication in order to administer the medicine during the visit, since this is a mandatory benefit under Medicaid. Alternatively, failure to receive medicine in a timely fashion could potentially result in such deterioration of health that hospitalization would be necessary. As indicated in Chapter 1, this issue could not be investigated directly in a two-year contract period, since it would require a much longer longitudinal study. Nevertheless, it was felt that some physicians' opinions would at least help to shed some light on this question.

The specific objectives of the physician survey were: (1) to estimate, in the view of the physicians, the proportion of their Medicaid patients who were unable, because of lack of Medicaid coverage, to fill their prescriptions; (2) to determine how physicians react to situations in which they either know or suspect that a Medicaid patient is unable to fill prescriptions because of inadequate financial resources (possible reactions include giving the patient free samples, recommending the cheaper--and possible less effective--nonprescription medicine, having the patient make more frequent office visits to receive the medication directly via injection and, in extreme cases, hospitalizing the patient); (3) to estimate, from the unique perspective of the physician, whether patients who have been unable to fill their prescriptions require more frequent hospitalizations, more office visits or more of the physician's time than other patients; and (4) to ascertain whether physicians, perhaps from a sense of frustration, cut down on the number of Medicaid eligibles they treat because of an inability on the part of the patients to fill their prescriptions.

Methodology

By the time the Physician Survey was developed, the state of Arkansas already had added prescribed medications to its Medicaid benefits package. The only other nonprescription state with which the project team had developed a rapport through the main survey was Oklahoma. In order to minimize logistical, sampling, and control problems, it was felt that the survey should be limited to one state. Hence, the logical choice was Oklahoma, and officials there readily agreed to provide the names and addresses of those physicians (M.D.s and D.O.s) who had submitted claims to Medicaid during 1973. This list consisted of roughly 1,500 physicians, from which a systematic sample of 400 was selected for the survey.

For budgetary reasons, a mail survey was the only type feasible. A questionnaire was constructed (see Appendix A) and sent out in November 1973, along with a cover letter from James Alden, M.D., of the project staff and a letter of endorsement from either the Oklahoma State Medical Association or the Oklahoma Osteopathic Association (see Appendix A). In order to permit a follow-up of the nonrespondents, an index card also was enclosed, with the request that it be signed and returned separately from the questionnaire, thus guaranteeing the anonymity of the respondent. Unfortunately, time simply did not permit the planned follow-up.

The returned questionnaires were coded, keypunched, and verified by the project staff. One-way frequency tables and several Chi-square tests were generated, using the Temple CDC6400 computer.

Results

Out of the sample of 400, there were 153 respondents, a response rate of 38.3%. Of these 153 physicians, 110 (72%) were generalists (family doctors, internists, pediatricians, and obstetricians/gyneocologists), and 43 (28%) were specialists. Roughly, 60% of the respondents were in solo practice, the remainder being divided between partnerships, associations, multispecialty group practices, and hospital or medical center based practices. Over 80% indicated that their principal mode of compensation was fees. On the average, these physicians spent about 93% of their professional time in patient care. The overwhelming majority spent little, if any, time in teaching, research, and administration. Almost half of the physicians practiced either in Oklahoma or Tulsa counties, the two major metropolitan areas in the state. Altogether, 40 of the 78 counties in the state were represented among the respondents.

TABLE 10-1. PHYSICIAN SURVEY: PERCENTAGE OF PATIENTS WHO WERE MEDICAID ELIGIBLE

Percentage of Patients	Number of Physicians	Percentage of Relative Frequency
0	6	4.1
1 to 10	89	60.5
11 to 25	31	21.1
26 to 50	16	10.9
51 to 75	4	2.7
76 to 100	1	0.7
Unanswered	6	NC*
Total	153	100.0

Mean: 13.89%

*Not included in the computation of relative frequencies.

Table 10-1 breaks down the responding physicians according to the percentage of their patients that they estimated were covered by Medicaid.

Thus, the mean percentage of Medicaid patients was roughly 14% among responding doctors. Approximately 14% of the providers indicated that at least 25% of their patients were eligibles; these are probably, for the most part, physicians who practice in hard-core poverty areas.

TABLE 10-2. PHYSICIAN SURVEY: PERCENTAGE OF MEDICAID PATIENTS WHO WERE UNABLE TO FILL PRESCRIPTIONS

Percentage of Patients	Number of Physicians	Percentage of Relative Frequency
0	15	15.5
1 to 10	34	35.1
11 to 25	18	18.6
26 to 50	21	21.6
51 to 75	7	7.2
76 to 100	2	2.1
Unable to estimate	48	NC*
Unanswered	8	NC*
Total	153	100.0

Mean: 22.4%

*Not included in the computation of relative frequencies.

From Table 10-2 it can be seen that, among the 97 physicians who were able to make such an estimate, the mean estimated percentage of their Medicaid patients who were unable to fill their prescriptions due to financial difficulties was approximately 22%. Almost one-third of the respondents felt that they could not make such an estimate.

TABLE 10-3. PHYSICIAN SURVEY: PHYSICIANS' REACTIONS TO INABILITY OF PATIENTS TO FILL PRESCRIPTIONS

Alternative/	Number of Physicians							
Number/Percentage	0	1-10	11-24	25-49	50-74	75-89	90-100	Unanswered
No longer issue prescriptions to patient								
Absolute frequency	54	16	6	3	5	1	4	64
Relative frequency (%)	60.7	18.0	6.7	3.4	5.6	1.1	4.5	NC
Give patient free samples								
Absolute frequency	5	31	20	16	18	14	18	31
Relative frequency (%)	4.1	25.4	16.4	13.1	14.8	11.5	14.8	NC
Recommend cheaper nonprescription medicine								
Absolute frequency	49	23	11	10	5	3	6	46
Relative frequency (%)	45.8	21.5	10.3	9.3	4.7	2.8	5.6	NC
Hospitalize patient for medicine								
Absolute frequency	72	25	4	4	0	1	0	47
Relative frequency (%)	67.9	23.6	3.8	3.8	0.0	0.9	0.0	NC
Have patient make more office visits for injections								
Absolute frequency	56	30	13	7	3	1	0	43
Relative frequency (%)	50.9	27.3	11.8	6.4	2.7	0.9	0.0	NC
Other								
Absolute frequency	15	4	2	3	4	2	1	122
Relative frequency (%)	48.4	12.9	6.5	9.7	12.9	6.5	3.2	NC

Over three-fourths of the physicians who made such an estimate answered that it was based upon complaints of the eligibles themselves; about 25% said that it was derived from conversation they had had with local pharmacists.

The physicians were asked how they responded to a situation where they either knew or suspected that a particular Medicaid patient was unable to fill prescriptions for financial reasons. The doctors were given six alternatives and asked to check the appropriate percentage interval for each. The results are summarized in Table 10-3.

By far, the most frequent response on the part of these physicians was to provide the patient with a free sample. Note, however, that the majority of physicians issued free samples in less than half the cases where they suspected that the prescriptions were not being filled.

TABLE 10-4. PHYSICIAN SURVEY: EFFECTS OF NOT FILLING PRESCRIPTIONS

Effect	Yes	No	Unanswered
More frequent hospitalization			
Absolute frequency	42	69	42
Relative frequency (%)	37.8	62.2	NC*
More office visits			
Absolute frequency	64	50	39
Relative frequency (%)	56.1	43.9	NC*
More of physicians' time			
Absolute frequency	63	52	38
Relative frequency (%)	54.8	45.2	NC*

*Not included in the computation of relative frequencies.

Roughly 40% of the physicians indicated that in some cases they no longer issued prescriptions to such patients. Fifty-five percent recommended cheaper nonprescription medicines, but most of these physicians did so for less than 25% of their patients. Less than one-third (39% of the generalists vs. 8% of the specialists, p = .0074) resorted to hospitalization; those that did, do so very infrequently. Almost half answered that they sometimes had such a patient make more office visits in order to receive the necessary medication through an injection. The use of this substitute method appeared to be positively associated with the proportion of the physician's patients who were eligibles (p = .0070) and was much higher among the generalists (56.1%) than the specialists (26.9%), p = .0179. The "other" reactions were too varied to permit ready tabulation.

It appears that the vast majority of the physicians who responded to the survey occasionally use one or more of the substitution methods indicated. By far the most popular method was the provision of free samples (used by 96%), followed by the recommendation of nonprescription medicine (54%), office visits (49%), and hospitalization (32%).

The physicians were asked whether their patients who were unable to fill prescriptions required more frequent hospitalizations, more office visits, or more office time than other patients. The results are presented in Table 10-4.

Thus, of those who answered the question, over half thought that the prescription problem resulted in more office visits and a greater consumption of the physician's time; almost two-fifths felt that it led to more frequent hospitalization. The key question, of course, but one which is impossible to answer definitively without a comprehensive, longitudinal study, is the magnitude of these effects. However, the evidence provided by this study is consistent with the contention that the noncoverage of prescriptions may result not only in a deterioration of the eligibles' health status but potentially in higher program costs as well.

The physicians' estimates on the effects of the prescription problem varied somewhat by generalist/specialist classification, the proportion of patients who were Medicaid eligibles, and the proportion of Medicaid patients who were unable to fill their prescriptions. Forty-six percent of the generalists, in contrast to 11.5% of the specialists, felt that this problem led to greater hospitalization ($p = .0034$), a not particularly surprising result in light of the above-mentioned finding that the use of hospitalization as a substitute was much more prevalent among the generalists. The hospitalization response was also positively associated with the proportion of the physicians' patients who were Medicaid eligibles ($p = .1364$) and the proportion of Medicaid patients who had difficulty filling their prescriptions ($p = .0087$). The percentage of doctors who felt that this problem induced more office visits was also similarly related to these variables: generalist, 66% vs. specialist, 30% ($p = .0017$), the proportion of the physicians' patients who were eligibles ($p = .0613$), and the proportion of Medicaid patients who were unable to fill their prescriptions ($p = .0002$). Among the physicians who contended that 25% or more of their Medicaid patients were malaffected by this noncoverage, 93% believed that it led to more office visits. The percentage who claimed a greater consumption of their time followed a similar pattern.

Finally, the physicians were asked whether they had cut down on the number of their Medicaid patients because of their inability to fill prescriptions. Of the 139 that answered this question, 15 (10.8%) had cut back and 124 (89.2%) had not.

Summary and Conclusions

This small study was not designed to yield any definitive answers to the very complex policy questions regarding the coverage of prescriptions; rather, it was intended to provide some insights into the nature and severity of the effects of noncoverage as perceived by physicians who treat Medicaid eligibles. Despite the limitations of this study in time and place, and despite the lack of follow-up on the nonrespondents, the hope is that it sheds some light on the problem and provides some information upon which future, more comprehensive investigation can build.

Roughly 14% of these physicians' patients were Medicaid eligibles and, of these, an estimated average of 22.4% were thought to be unable to fill their prescriptions due to the combination of lack of coverage and inadequate resources. Over 90% of the physicians were providing free samples to help alleviate this difficulty, although the majority did this for less than half these problem patients. Less than one-third of the physicians resorted to hospitalization as a method of substitution, most of these less than 10% of the time. About half of the physicians occasionally recommended nonprescription medicines or had the patient make more frequent office visits for injections. Forty percent indicated that they sometimes no longer issued any prescriptions, and 11% said they had reduced the number of Medicaid patients because of the problem. Over one-third of the physicians felt that this problem led to greater hospitalization; over half felt it led to more office visits and consumed more of their time. These results lead one to cautiously infer that the use of substitution methods was fairly widespread, although, for the most part, limited to a relatively small percentage of the affected Medicaid eligibles. Thus, there is some evidence that the noncoverage of prescriptions may have led to a deterioration of the eligibles' health status and greater program costs.

CHAPTER 11

SUMMARY AND CONCLUSIONS

Introduction

The study has been successful in addressing most of the objectives initially outlined (page 3) in cooperation with the sponsor (SRS). The primary objectives, essentially, were: to identify the proportion of eligibles receiving health care services--whether through Medicaid or elsewhere; to determine what kinds of services were being utilized by the Medicaid eligibles; to determine from whom services were received; and to determine the source of payment for services. Tables 11-1 and 11-2 present some composite figures which address, respectively, the first two and the last of these primary objectives.

The secondary objectives were to investigate the impact on utilization of the availability of "optional services" under various Medicaid programs and to measure the proportion of eligibles who felt that they had unmet medical needs during the reference period, including, insofar as possible, their explanation as to why the need was not satisfied. Table 11-3 presents composite data on unmet needs.

Finally, Table 11-4 presents composite data which reflect the Medicaid eligibles' perception of their own health status, the tertiary objective of the study.

Utilization

The utilization data for the six separate health services (the first two are mandatory, the other four are optional services) which are shown in Table 11-1 follow for the most part, a predictable pattern by age and welfare category. There tend to be rather sharp differences in utilization between the three adult categories and the AFDC children for virtually all services. This is intuitively reasonable, knowing that morbidity does have a strong age-relatedness.

For specific services, as well, the results seem believable. Hospitalization tends to be highest among the disabled and AFDC adults. The latter group includes a number of welfare mothers who were recently hospitalized for childbirth. A large proportion of the elderly also reported an episode of hospitalization, but the proportion for AFDC children was markedly lower. The tendency of the OAA group to have higher proportions of eligibles obtaining glasses and other vision services is consistent with well-known patterns of vision deterioration. Low use of dental care by the elderly is consistent with their widespread use of dentures, while the relatively high levels of dental care received by AFDC children reflects the extensive use of preventive and restorative dental visits among this age group. The high level of dental usage by AFDC adults probably reflects the well-known relationship between pregnancy and dental needs.

For both physician visits and prescriptions, utilization in the adult categories ran well ahead of utilization by children.

On an intercity basis, substantial differences in utilization existed. This was particularly true for optional services, where, as might be expected, the presence of a "covered" service was typically associated with higher levels of use. Nevertheless, it also seemed clear that other factors, such as the supply/availability of services, were also important. For instance, Little Rock eligibles, faced with an acknowledged shortage and maldistribution of both health care personnel and facilities, showed consistently lower utilization of the mandatory hospitalization and physician benefits than their counterparts in the other cities in virtually every subpopulation described by race, welfare category and/or age.

In some instances a single facility, such as Grady Hospital in Atlanta, may play such an important role that it influences citywide statistics. Grady, a municipally run institution, had provided the poor with many free services before Medicaid came into being. Thus, it had a well-established reputation as a primary source of care for the poor. With the advent of Medicaid, Grady remained a major source of care, a role that was further enhanced by the widespread knowledge that it continued to provide free care for a number of services not covered under Georgia Medicaid. Grady also illustrates the importance of local prejudices/attitudes on the utilization of health care services. It had been suggested in our presurvey site visit that many whites avoided Grady because it was identified as a haven for poor blacks. The data tended to support this.

Overall, it was found that utilization tended to be higher among whites than blacks for most health care services. This was true in three of the four cities studied, with Trenton as the exception. The pattern seemed to be most consistent among AFDC children. If it is assumed that a substantial proportion of the utilization of health care services among the young falls in the category of preventive/diagnostic care, a not unreasonable assumption, the data in Table 11-1 suggest that further analysis is needed to determine the extent to which the higher levels of use by young whites may be at least partially responsible for the relatively lower use by whites (in comparison to blacks) in many adult categories. In other words, it may be possible to document the efficacy of preventive medicine over time.

It has been noted that interracial differences in utilization may also reflect sociological factors, such as housing patterns. Thus, to the extent that poor whites have less tendency to all be grouped in low-income ghettos, as is true of most poor blacks, the whites tend to be more generally exposed to middle-class values regarding health care. This should account, in part, for the generally higher percentage of utilization among whites.

The data show what appears to be an overpowering impact of the availability of financing for a truly comprehensive package of health care benefits. Thus, utilization for all services tends to be higher in Trenton than elsewhere--even for individual services that are equally well covered in other sites. When comprehensive coverage exists, it appears to promote an overall awareness of

TABLE 11-1. INTERSITE/INTERPROGRAM SERVICE UTILIZATION PATTERNS*

Service	Welfare Category	Percentage											
		Atlanta			Little Rock			Oklahoma City			Trenton		
		Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
Hospitalized, 1972-73	AD	42.0	35.5	45.0	28.4	32.0	25.0	43.3	45.7	32.3	45.5	34.4	54.9
	OAA	25.9	30.8	22.9	28.5	31.0	25.7	33.9	35.3	31.6	33.7	37.2	30.2
	AFDC, adult	35.3	37.5	35.1	30.6	39.6	29.0	46.1	48.9	44.8	40.3	30.6	44.5
	AFDC, child	15.3	22.0	14.8	12.5	16.4	11.9	18.3	22.9	15.2	20.2	20.5	20.1
Physician visit, 1973	AD	81.1	74.2	83.8	64.7	66.0	63.5	67.7	69.0	61.3	81.1	73.8	87.3
	OAA	72.4	75.4	70.6	59.2	60.7	57.4	64.2	64.7	64.5	68.2	65.1	71.4
	AFDC, adult	76.2	75.0	76.3	60.5	68.8	59.1	70.6	73.9	67.6	68.7	70.5	67.9
	AFDC, child	49.4	52.3	49.1	39.8	41.8	39.5	49.9	61.1	43.4	51.7	53.5	51.0
Dental visit, 1972-73	AD	34.2	29.0	36.3	27.5	24.0	30.8	23.2	20.9	32.2	35.6	24.6	45.1
	OAA	9.7	6.2	11.9	14.5	11.9	17.6	13.7	13.4	15.7	17.6	9.3	26.2
	AFDC, adult	50.0	40.6	50.8	40.4	35.5	41.3	44.1	52.2	39.1	49.4	48.7	49.6
	AFDC, child	49.0	58.7	48.3	35.9	54.8	33.2	27.6	35.7	21.9	40.8	52.6	36.6
Obtained glasses, 1972-73	AD	22.5	29.0	20.0	16.7	22.0	11.5	22.0	22.5	19.4	44.7	44.3	45.1
	OAA	28.7	26.2	30.3	21.8	22.0	21.6	16.4	16.1	17.1	42.4	41.9	42.9
	AFDC, adult	14.3	18.8	13.9	15.1	20.8	14.1	14.2	15.2	13.3	36.7	32.8	38.4
	AFDC, child	4.8	8.3	4.5	5.7	7.5	5.4	6.7	8.9	4.7	17.6	17.2	17.7
Vision care, 1972-73	AD	36.0	29.1	38.8	27.5	32.0	23.0	24.4	24.1	25.9	44.7	37.7	50.7
	OAA	40.8	32.3	45.9	32.9	36.9	28.4	29.4	30.2	27.7	48.2	39.5	57.2
	AFDC, adult	29.7	46.9	28.3	27.5	35.4	26.1	25.5	26.1	25.7	43.8	35.0	47.6
	AFDC, child	18.8	27.5	18.0	26.3	26.0	26.4	14.9	19.3	11.2	27.4	26.4	27.7
Prescriptions, 1973	AD	54.1	48.4	56.3	37.3	40.0	34.6	50.0	53.5	35.5	61.4	59.0	63.4
	OAA	47.1	58.5	40.4	43.4	44.0	42.6	41.5	42.2	39.5	50.6	46.5	54.8
	AFDC, adult	50.7	53.1	50.5	41.0	62.5	37.3	56.4	57.6	57.1	57.7	62.3	55.7
	AFDC, child	25.7	33.0	25.0	23.4	33.6	22.0	33.6	39.3	29.9	35.2	36.1	34.8

*As noted in Table 7-2 (p. 118) all intersite comparisons in Chapter 7 were made with "others" removed from the "white" racial category for the purpose of obtaining more precise comparisons. For the composite tables in this concluding chapter, however, the "others" have been put back into the comparisons; that is, Tables 11-1 to 11-4 are direct composites drawn from the tables in Chapters 3-6. This was felt to be reasonable in light of the very minor variations that resulted from factoring out the "other" category.

coverage which does not exist when only a few selected benefits are provided. As a result, rather than finding a "utilization" or substitution effect, which would lead to proportionally heavier use of mandatory benefits (e.g., physician visits) in those sites with few, if any, optional services, the data seem to reflect a sort of induced demand effect in Trenton; it tended to have the highest levels of utilization for all services studied, both mandatory and optional. This is a potentially critical consideration in any effort to modify Medicaid or Medicare or to enact a national health insurance program.

It has been noted that a number of other variables may also account for some of the intercity differences in utilization. Regional differences in medical practice (e.g., the Northeast typically has had higher levels of hospitalization than other sections of the country), average level of education, average income, degree of unionization of the work force and many other factors may, conceivably, be more important variables than the comprehensivity of available coverage. Though this seems unlikely, more study is indicated.

Another important observation from the data is that interracial differences in utilization tend to either disappear or reverse where full coverage is available. Thus, to the extent that the popularly held belief that minorities have had less access to the health care system than whites is true, a comprehensive benefit package seems to be somewhat effective in correcting this inequity. As noted, this has apparently also been influenced by the close relationship between the Civil Rights movement in this country and many health initiatives over the past decade. Many of the special health programs (e.g., OEO, Model Cities) have been located in minority neighborhoods, and many of the citizen rights/citizen self-help groups that have emerged have been dominated by minorities. Through their efforts, minority eligibles may become better informed as to the available benefits. In addition, long standing employment patterns, e.g., minorities as the last to be hired and the first to be fired, probably also lead to minorities spending longer durations on the eligibility rolls; this, in turn, forces greater dependence on welfare programs and should encourage familiarity with available benefits.

This is reflected, to a degree, in Table 11-2, which shows proportionally more whites than blacks incurring out-of-pocket costs for medical services in two out of every three of the subpopulations listed. In other words, whites not only have higher overall utilization of services (Table 11-1), but they also get considerably more of their care outside the Medicaid system. (Observe that the overall pattern is neutralized--actually slightly reversed--in Trenton, with its comprehensive benefit package.)

As has been noted, this, too, may be traceable in part to living patterns. Poor whites, because they are less likely to live as groups in ghettos than poor blacks, also tend, in most subpopulations, to make proportionally more use of private physicians than blacks, the latter relying more heavily on hospital emergency rooms or clinics as a source of care. Given that most Americans pick their doctors rather unscientifically--i.e., by recommendation of friends or family--it is likely that poor whites frequently are either reluctant to identify themselves as welfare eligibles when visiting a suburban physician, or they find that their physician does not accept Medicaid patients.

TABLE 11-2. INTERSITE/INTERPROGRAM COMPARISONS OF OUT-OF-POCKET PAYMENTS FOR SERVICES*

Service	Welfare Category	Percentage											
		Atlanta			Little Rock			Oklahoma City			Trenton		
		Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
Hospitalization	AD	10.6	27.3	5.6	10.3	12.5	7.7	11.3	11.9	10.0	3.3	4.8	2.6
	OAA	22.2	15.0	28.0	20.0	26.9	10.5	12.0	9.2	20.8	13.8	18.7	7.7
	AFDC, adult	6.0	8.3	5.6	15.2	10.5	16.2	20.2	33.3	9.1	8.9	14.3	7.4
	AFDC, child	12.1	20.8	11.0	17.4	25.0	16.0	13.3	12.5	14.8	5.2	6.1	4.8
Physician	AD	6.0	14.3	3.6	24.3	20.0	23.6	14.3	15.6	10.0	4.5	2.1	6.3
	OAA	13.0	20.8	8.2	33.7	41.5	24.1	11.3	12.6	7.8	19.4	16.7	21.9
	AFDC, adult	9.5	28.0	8.0	20.6	27.3	19.3	15.3	15.3	13.7	8.4	8.1	8.6
	AFDC, child	6.6	6.7	6.6	13.8	21.5	12.6	12.3	14.7	9.6	4.1	4.2	4.0
Dental care	AD	23.7	22.2	24.1	35.7	50.0	25.0	55.3	51.9	70.0	4.3	0.0	6.2
	OAA	76.5	65.0	76.9	54.3	75.0	38.5	68.3	75.9	50.0	13.3	25.0	9.1
	AFDC, adult	56.5	55.7	69.2	41.2	70.6	36.8	50.0	64.6	30.0	6.6	9.0	5.7
	AFDC, child	15.8	28.1	14.6	10.0	16.2	8.6	26.4	31.0	20.4	2.0	4.8	0.6
Eyeglasses	AD	76.0	55.6	87.5	70.6	63.6	83.3	83.3	82.8	83.3	6.8	3.7	9.4
	OAA	86.0	88.2	84.5	91.3	91.9	90.6	85.4	85.3	84.6	11.1	16.7	5.6
	AFDC, adult	82.0	83.3	81.8	85.7	90.0	84.6	75.9	71.4	78.6	20.5	18.3	21.3
	AFDC, child	53.7	66.7	51.7	33.8	27.3	35.1	46.8	32.0	57.9	12.8	8.5	14.3
Other vision care	AD	16.7	0.0	20.0	54.5	80.0	33.3	39.1	42.9	0.0	6.1	0.0	8.0
	OAA	39.4	45.4	36.4	65.9	68.2	63.2	38.0	39.5	27.3	12.0	8.3	15.4
	AFDC, adult	25.9	16.7	27.1	54.8	83.3	48.0	44.8	62.5	16.7	10.2	13.0	9.4
	AFDC, child	14.2	12.5	14.4	13.0	15.8	12.6	26.4	20.0	25.0	7.1	8.0	6.8
Prescriptions	AD	32.7	50.0	26.0	84.3	88.6	80.0	91.0	92.0	92.6	3.3	5.6	1.5
	OAA	48.3	69.5	34.8	96.1	98.2	93.1	90.6	92.5	86.2	4.4	2.9	5.9
	AFDC, adult	28.6	44.8	27.3	91.9	90.9	92.0	95.8	95.5	96.9	7.7	8.1	7.6
	AFDC, child	44.1	73.3	41.7	81.3	85.2	80.6	93.5	95.0	93.7	3.1	4.7	2.6

*See footnote to Table 11-1.

Despite the fact that the data from the main survey do not support the substitution hypothesis, it is interesting to note (Chapter 10) that many physicians who serve welfare patients do perceive this effect in operation. Over half of the physicians surveyed felt that patients who were unable to fill prescriptions (lack of coverage) did make more office visits to the doctor and also consumed more of the physician's time than did patients who were able to fill their prescriptions. Additional study may be worthwhile in this regard, with an effort made to control at least some of the many variables involved.

Based on very limited data which was of questionable reliability, some significant differences in utilization of health care services between urban and rural eligibles was noted (Chapter 8). Those results, some rather surprising, do suggest that further investigation of urban-rural relationships is merited.

Unmet Needs and Health Status

One of the secondary objectives of the study was to determine the level of unmet needs among Medicaid eligibles. The approach used was simple and direct. Eligibles were asked in the survey whether they felt that they had experienced any unmet medical needs for each of a variety of medical services. The results are tabulated in Table 11-3. Again, there is a fairly strong tendency for the numbers to follow predictable patterns based on age/aid category and coverage patterns. It is also interesting to note that, among the subpopulations shown, whites and blacks are about equal in the number of times they have the highest percentage of perceived unmet needs.

While the levels of unmet need which are reported are generally fairly substantial, it is interesting to note that only one subpopulation in the entire table shows over half of the eligibles reporting an unmet need (AFDC adult-white-dental care).

Any serious attempt to evaluate medical needs, naturally, raises the question as to who should define the "need." Should it be based on patient perception or professional opinion? Logical arguments can be advanced for both methods. The approach used here was dictated by available resources and the belief that patient percenption is most critical to behavioral response. Short of some form of compulsory periodic examination and treatment, patient satisfaction is, pragmatically, a more realistic goal than professionally determined "good health." Unless an individual first perceives an unmet medical need, there is little likelihood that he/she will enter the health care system for evaluation; even if the recent emphasis--mostly lip service to date--on preventive medicine does take hold and lead to large numbers of individuals taking regular physical examinations, there is no guarantee that treatment will be accepted for all detected "needs." For instance, a number of respondents who indicated unmet dental needs listed "fear" as the primary reason for the unmet need. The general antipathy with which other preventive measures are greeted by the public (e.g., eliminate smoking and overeating, introduce regular exercise) suggests that behavior modification of the consumer

TABLE 11-3. INTERSITE/INTERPROGRAM COMPARISONS OF UNMET NEEDS*

Service	Welfare Category	Percentage											
		Atlanta			Little Rock			Oklahoma City			Trenton		
		Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
Physician, 1973	AD	34.2	41.9	31.3	19.6	18.0	21.2	31.1	31.0	35.5	12.1	8.2	15.5
	OAA	28.7	30.8	27.5	20.6	22.6	18.2	22.4	20.2	28.9	9.4	14.0	4.8
	AFDC, adult	15.4	28.1	14.4	15.4	22.9	14.1	16.2	13.0	19.0	8.2	11.5	6.8
	AFDC, child	3.1	4.6	2.9	1.7	2.7	1.5	3.4	5.0	2.5	1.3	1.3	1.3
Dental care, 1972-73	AD	30.6	35.5	28.8	33.3	34.0	32.7	40.9	40.3	41.9	23.5	13.1	32.4
	OAA	24.1	20.0	26.6	21.5	16.7	27.0	24.4	22.0	31.6	12.9	11.6	14.3
	AFDC, adult	43.5	53.1	42.7	33.6	37.5	33.0	43.6	47.8	41.9	18.4	18.0	18.5
	AFDC, child	15.1	20.2	14.7	11.7	19.9	10.6	16.7	18.2	16.0	7.6	7.1	7.7
Glasses, 1972-73	AD	45.9	48.4	45.0	37.3	40.0	34.6	41.5	41.1	48.4	12.9	8.2	16.9
	OAA	41.4	41.5	41.3	33.2	29.8	37.2	37.1	34.9	44.7	21.2	18.6	23.8
	AFDC, adult	32.0	37.5	31.6	27.8	22.9	28.6	26.0	28.3	22.9	11.3	7.7	12.9
	AFDC, child	8.6	9.2	8.5	6.2	2.7	6.7	8.7	7.1	10.0	5.0	3.6	5.5
Other vision care	AD	40.5	45.2	38.8	32.4	38.0	26.9	40.9	41.9	38.7	13.6	8.2	18.3
	OAA	40.8	36.9	43.1	38.0	32.1	44.6	40.5	39.9	43.4	18.8	16.3	21.4
	AFDC, adult	24.3	34.4	23.5	27.2	25.0	27.5	26.0	28.3	24.8	6.4	6.0	6.6
	AFDC, child	7.8	10.1	7.7	5.7	4.8	5.8	8.9	7.9	9.7	1.9	1.7	1.9

*See footnote to Table 11-1.

may be more important as a goal than simply attempting to modify or restructure the health care delivery system. The latter approach, by itself, seems doomed to failure.* Interestingly, our results disclosed surprisingly small proportions of eligibles with serious complaints about the way health care was organized or delivered. Referring to Chapter 7 (pp. 127, 140 and 155), in only one subpopulation out of 24 did as many as 10% of the eligibles describe available health services as "poor." Granted, these evaluations may be both unsophisticated and wrong, nevertheless, they do not lend optimism to those seeking a groundswell of support for revolutionizing our health care system.

Our final, tertiary, objective was to determine the health status of the Medicaid eligibles. Again, we were forced to rely on the individual perceptions of the eligibles. The results are tabulated in Table 11-4. Once more, the results seem intuitively acceptable. In all four sites, the disabled have the largest proportion who report their health as poor, followed by the elderly, AFDC adults and, finally, AFDC children. Though fairly sharp differences by race are apparent, they do not seem to follow any consistent pattern except among the AFDC children, where proportionally more whites than blacks are classified in poor health in all four locations. As previously noted, however, the eligibles do not appear to consistently correlate their health status with the quality of available health services (Chapter 7).

This tends to support the suggestion, above, that it will take something other than a reorganized health care delivery system to have a significant impact on health status. More than likely, improved health status will result more from better education, greater job opportunities, good nutrition, and many other environmental factors than from any changes in medical care proper.

Policy Implications

It seems clear from the survey results that a relatively comprehensive package of benefits is associated with higher levels of utilization of all health care services, thus the potential induced demand of such a program should be carefully evaluated. This is particularly important if there is

---

*We are aware of other recent efforts to study unmet needs based on clinical evaluation, "The Meharry Medical College Studies of Unmet Needs for Health and Welfare Care and Services," Samuel Wolfe, M.D., et al., APHA Annual Meeting, New Orleans, La., October 21, 1974. Naturally, this produces much higher proportions of unmet needs. Those findings have sometimes been used to condemn our existing health care system--especially as it relates to the poor. But it may be, as noted above, that the problem is not with the system per se, but rather with the way the system is used. Furthermore, until some careful studies are conducted using appropriate poor-rich control groups for both methods, something which to our knowledge has not been done, it is impossible to make sound inferences as to which group is most well served.

TABLE 11-4. INTERSITE/INTERPROGRAM COMPARISONS OF HEALTH STATUS*

		Percentage											
		Atlanta			Little Rock			Oklahoma City			Trenton		
Rating	Category	Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
Excellent	AD	0.0	0.0	0.0	2.0	2.0	1.9	3.7	2.3	9.7	3.8	6.6	1.4
	OAA	3.4	3.1	3.7	4.7	3.6	6.1	6.7	6.0	7.9	7.1	2.3	11.9
	AFDC, adult	6.1	3.1	6.3	6.5	10.4	5.8	6.9	4.3	9.5	8.7	14.2	6.3
	AFDC, child	16.4	28.4	15.4	12.3	17.8	11.5	19.9	17.5	22.2	14.6	20.3	12.6
Good	AD	23.4	22.6	23.8	11.8	18.0	5.8	15.2	15.5	12.9	24.2	36.1	14.1
	OAA	35.1	24.6	41.3	22.8	16.1	30.4	31.1	29.4	34.2	38.8	46.5	31.0
	AFDC, adult	38.1	40.6	37.9	32.7	22.9	34.4	39.2	37.0	40.0	48.4	44.3	49.9
	AFDC, child	65.9	49.5	67.2	63.3	52.7	64.8	59.9	60.0	59.9	68.2	65.4	69.2
Average	AD	14.4	12.9	15.0	40.2	38.0	42.3	35.4	35.7	32.3	31.1	21.3	39.4
	OAA	25.3	30.8	22.0	35.1	38.7	31.1	31.8	33.9	26.3	38.8	39.5	38.1
	AFDC, adult	37.9	40.6	37.6	42.6	33.3	44.2	32.8	34.8	30.5	29.0	27.9	29.5
	AFDC, child	15.6	14.7	15.7	21.8	21.2	21.9	17.1	17.9	15.7	14.6	11.5	15.7
Poor	AD	62.2	64.5	61.3	46.1	42.0	50.0	44.5	45.0	45.2	40.9	36.1	45.1
	OAA	36.2	41.5	33.0	37.3	41.7	32.4	30.4	30.7	31.6	15.3	11.6	19.0
	AFDC, adult	18.0	15.6	18.2	18.2	33.3	15.6	21.1	23.9	20.0	13.8	13.1	14.1
	AFDC, child	2.0	7.3	1.5	2.3	8.2	1.5	3.0	4.3	2.2	2.2	2.5	2.1

*See footnote to Table 11-1.

any serious deficiency in the supply and/or distribution of services/ facilities, since the resulting impact on price, as was experienced after the original implementation of Medicare and Medicaid, can be devastating.

Not surprisingly, a broad benefit package tends to produce greater consumer satisfaction, as reflected in fewer perceived unmet needs, and a tendency to evaluate personal health status more favorably.

This study suggests that both Medicaid eligibles and county welfare workers put top priority on the coverage of prescription drugs as a highly desirable benefit. However, experience elsewhere (e.g., England) suggests that full coverage of prescriptions can be quite costly. The survey data indicate that very high proportions of eligibles find it possible to fill and refill all prescription orders as needed whether or not coverage is available and, thus, whether or not out-of-pocket expenses are necessary.* Given the findings on unmet needs, one might recommend that in developing any national health insurance program which, for political, economic and/or social reasons must stop short of total coverage for all health care services, coverage of prescriptions should not be the top priority item.

Clearly, the Medicaid program has served to make health care more readily available to the nation's poor. It is equally clear, however, that the continued existence of a broad range of optional services which are differentially implemented by states has created some serious inequities. More uniform benefits on a national scale appear to have merit.

The significant impact associated with inadequate supply and distribution of health care resources, as demonstrated by the statistics from Little Rock, moreover, suggest that some national policy relating to the supply of manpower/facilities may be necessary. Efforts to date in this regard have clearly been ineffective.

Conclusion

In general, a rather high level of success was achieved in addressing the specific objectives of the study. Yet because of the complex set of socio-economic-political forces which impact on the health care field, many conclusions can only be tentative, and resulting policy implications/recommendations must be both speculative and qualified. As is so often the case in social research, it is far easier to describe what happens than to satisfactorily explain why things happen.

---

*We are aware of the fact that our survey results--which suggest that the absence of prescription benefits is of little consequence--are in conflict both with popular opinion and some other research findings. It should be noted that there was evidence that some respondents misinterpreted the term "prescriptions" to be synonomous with "medication," so that multiple prescriptions for a given medication would be reported as one prescription. This has the tendency of decreasing the proportion of unfilled prescriptions. This suggests that further study is merited, because potential policy implications are significant.

APPENDIX A--PART I

The Main Survey

FOR MIS OFFICE USE ONLY:

SAMPLE STRATA:

CITY - *[1]	CLASSIFICATION - *[2]	RACE - *[3]	NUMBER - *[4-6]
☐0 Atlanta	☐0 OAA - 74 or under	☐0 W	☐☐☐
☐1 Little Rock	☐1 OAA - 75 or older	☐1 NW	
☐2 Oklahoma City	☐2 AD	☐2 AI	
☐3 Trenton	☐3 AFDC - 3 or fewer	☐3 U	
	☐4 AFDC - 4 or more	☐4 O	

RECIPIENT'S NAME: ____________________

ADDRESS: ____________________

CITY: ____________ STATE: ____________ ZIP: ____________

TELEPHONE: Area Code (   ) ☐☐☐ — ☐☐☐☐

Good morning. I'm ____________ with Marketing Information Service. We're conducting a survey for Temple University of Philadelphia, Pennsylvania, having to do with the use of medical services by welfare clients.

You have been selected as one of a special group of clients whose use of these services and opinions about them can be very helpful. The information you provide may make it possible to serve you and other welfare clients better and more effectively. Your individual identity will be protected, and your comments will in no way affect your current elegibility for benefits or your current benefit payments.

INTERVIEWER'S NAME: ____________________

DATE OF INTERVIEW: ____________________

TIME INTERVIEW BEGUN: ____________ TIME ENDED: ____________ 1[8-9]

CALL RECORD:

		Time of Call 1[10-11]		Result of Call 1[12]	
Date of Call	1. ________		1. ________		1. ________
	2. ________		2. ________		2. ________
	3. ________		3. ________		3. ________
	4. ________		4. ________		4. ________

Result Codes: 1[13]

1 - No one at home
2 - Respondent not at home
3 - Vacant
4 - Refused
5 - Complete interview
6 - Incomplete interview
7 - Other [SPECIFY] ____________________

1[14-17] always blank

SECTION A 1. Beginning with yourself, would you please tell me the name, age and sex of each member of this household? [IF THE RESPONDENT IS NOT THE NAMED RECIPIENT ON THE COVER OF THIS QUESTIONNAIRE, SPECIFY REASON HERE: ______________________ ______________________.]	Respondent's First Name A *[7]	First Name B
	Last	Last
	Age 1[18-19]	Age
	Sex M1 F2 1[20]	Sex M1 F2
2. What relation is ________ to (recipient's name)? 1 = recipient 2 = grandparent 3 = parent 4 = spouse 5 = son/daughter 6 = brother/sister 7 = grandchild 8 = unrelated person 9 = other [SPECIFY]	2. ________ Specify if "9" ________ ________ ________ 1[21]	2. ________ Specify if "9" ________ ________ ________
3. What is ________'s marital status? 1 = single 2 = married 3 = widowed 4 = divorced/separated 5 = other	3. ________ 1[22]	3. ________
4. What was the last year of school that ________ completed? [RECORD EXACT NUMBER]	4. ________ 1[23-24]	4. ________
5. [NOTE: MAKE OBSERVATION OF RACE OF RECIPIENT ONLY AND RECORD CORRESPONDING CODE TO THE RIGHT. IF YOU ARE UNABLE TO OBSERVE THE RECIPIENT, CHECK THE APPROPRIATE BOX BELOW AND INDICATE WHAT APPEARS TO BE THE PREDOMINANT RACE OF THE OTHER FAMILY MEMBERS.] Race: 1 = white 2 = black 3 = American Indian 4 = other [SPECIFY] ☐ recipient not observed apparent race of family ______________________	5. ________ 1[25] 1[26]	5. ________
	1[27-30] always blank	

SECTION B - ELIGIBILITY AND HEALTH INSURANCE

1. Is (recipient's name) eligible for Medicaid, that is, medical assistance under some state welfare program? ☐$_1$ yes → [CIRCLE RECIPIENT'S NAME] ☐$_2$ no ☐$_3$ don't know		
2a. Does (recipient's name) have a Medicaid card like this? [SHOW SAMPLE MEDICAID CARD] ☐$_1$ yes ☐$_2$ no → [SKIP TO QUESTION 3a]	1[31]	
2b. May I see this card, please? ☐$_1$ card shown [VERIFY THAT CARD SHOWN IS RECIPIENT'S CARD] ☐$_2$ card not available ☐$_3$ refused [IF CARD IS SHOWN, INDICATE TO THE RIGHT WHICH INDIVIDUALS ARE COVERED BY THE MEDICAID CARD, AS FOLLOWS:] 1 - covered 2 - not covered [INTERVIEWER: AT THE TOP OF THE QUESTIONNAIRE, CIRCLE ALL NAMES APPEARING ON THE CARD.]	2b. 1[32] ________ 1[33]	2b. ________
3a. Is there anyone else in this household who is eligible for Medicaid benefits under this card or under this case? ☐$_1$ yes ☐$_2$ no → [SKIP TO QUESTION 4a] ☐$_3$ don't know → [SKIP TO QUESTION 4a]		
3b. Who is eligible to receive these Medicaid benefits? [INDICATE ELIGIBILITY OF EACH HOUSEHOLD MEMBER TO THE RIGHT AS FOLLOWS:] 1 - eligible 2 - not eligible 3 - don't know [INTERVIEWER: AT TOP OF QUESTIONNAIRE, CIRCLE NAMES OF ALL ADDITIONAL INDIVIDUALS SAID TO BE ELIGIBLE.]	3b. ________	3b. ________
	1[34]	

[NOTE: ASK QUESTIONS 4a THROUGH 4c ONLY ABOUT INDIVIDUALS 65 YEARS OF AGE OR OLDER. FOR THOSE UNDER 65, SKIP TO QUESTION 5a.] 4a. Do any members of this household have a Medicare card like this? [SHOW SAMPLE MEDICARE CARD] ☐$_1$ yes ☐$_2$ no ⟶ [SKIP TO QUESTION 5]	1[35]	
4b. For what members of the household can this Medicare card be used? [INDICATE ELIGIBILITY OF EACH PERSON TO THE RIGHT AS FOLLOWS:] 1 = eligible 2 = not eligible 3 = don't know	4b. ________ 1[36]	4b. ________
4c. May I see this card, please? ☐$_1$ card shown ☐$_2$ card not available ☐$_3$ refused [IF CARD IS SHOWN, INDICATE TO THE RIGHT WHICH INDIVIDUALS ARE COVERED BY THE MEDICARE CARD, AS FOLLOWS:] 1 = covered, hospital only 2 = covered, hospital and medical 3 = not covered	4c. 1[37] ________ 1[38]	4c. ________
5a. Do any members of the household have other insurance to cover hospitalization, medical or surgical costs? [NOT LIFE OR CAR INSURANCE] ☐$_1$ yes ☐$_2$ no ⟶ [SKIP TO INSTRUCTION A] ☐$_3$ don't know ⟶ [SKIP TO INSTRUCTION A]	1[39]	
5b. What is the other coverage? [CHECK ALL THAT APPLY] ☐$_1$ Blue Cross ☐$_2$ Blue Shield ☐$_3$ commercial insurance company ☐$_4$ other [SPECIFY] ________________	1[40-42]	
5c. What members of the household are eligible for these additional benefits or insurance? 1 = covered 2 = not covered 3 = don't know	5c. ________ 1[43]	5c. ________

INSTRUCTION A

INTERVIEWER: BE SURE TO CHECK THAT YOU HAVE CIRCLED ALL THE NAMES OF THOSE WHO ARE ELIGIBLE FOR MEDICAID. IF, AFTER CHECKING, NO NAMES HAVE BEEN CIRCLED, THEN TERMINATE INTERVIEW.

1[44-47] always blank

[INTERVIEWER: ASK THIS AND ALL SUCCEEDING SECTIONS ONLY ABOUT THOSE INDIVIDUALS WHOSE NAMES HAVE BEEN CIRCLED.]		
SECTION C - OVERNIGHT HOSPITALIZATION 1a. Since January 1 of this year, that is, during 1973, has ________ been, or is he currently, an overnight patient in a hospital? [RECORD ALL THAT APPLY] 1 - yes, currently 2 - yes, has been 3 - no → [SKIP TO QUESTION 2a] 4 - don't know → [SKIP TO QUESTION 2a]	1a. ________ 1[48]	1a. ________
1b. How many times was ________ hospitalized during 1973? [RECORD EXACT NUMBER. DON'T INCLUDE CURRENT HOSPITALIZATION.]	1b. ________ 1[49]	1b. ________
2a. During 1972, that is, between January 1 and December 31 of last year, was ________ an overnight patient in a hospital? 1 - yes 2 - no → [SKIP TO INSTRUCTION A] 3 - don't know → [SKIP TO INSTRUCTION A]	2a. ________ 1[50]	2a. ________
2b. How many times? [RECORD EXACT NUMBER]	2b. ________ 1[51]	2b. ________
INSTRUCTION A [INTERVIEWER: IF INDIVIDUAL HAS ANSWERED "NO" OR "DON'T KNOW" TO BOTH QUESTIONS 1a AND 2a, THAT IS, IF HE HAS NEVER BEEN HOSPITALIZED IN 1972 OR 1973, SKIP TO QUESTION 8a. FOR EACH PERSON WHO HAS BEEN HOSPITALIZED IN 1972 OR 1973, CONTINUE WITH INSTRUCTION B.]		
INSTRUCTION B [INTERVIEWER: RECORD THE TOTAL NUMBER OF TIMES THAT EACH INDIVIDUAL HAS BEEN HOSPITALIZED DURING 1972 AND 1973 TO THE RIGHT, EXCLUDING ANY CURRENT HOSPITALIZATION. TO DO THIS, ADD RESPONSES IN QUESTIONS 1b AND 2b AND RECORD TOTAL TO THE RIGHT. IF TOTAL IS ZERO, THAT IS, IF THE INDIVIDUAL'S CURRENT HOSPITAL STAY IS THE ONLY TIME HE HAS BEEN HOSPITALIZED IN 1972 OR 1973, SKIP TO QUESTION 9a. OTHERWISE, ASK QUESTIONS 3 THROUGH 7b ABOUT THE LAST HOSPITAL STAY.]	INSTRUCTION B ________ 1[52-53]	INSTRUCTION B ________
3. The last time ________ was an overnight patient in the hospital, what was the reason he was there? [RECORD EXACT REASON GIVEN]	3. ________ ________ ________ 1[54-55]	3. ________ ________ ________
4. How long did ________ stay in the hospital on this visit? [RECORD EXACT ANSWER]	4. ________ 1[56-57]	4. ________
5. How was this hospital stay paid for? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family → [SKIP TO QUESTION 6b] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid → [ASK: Why not? SPECIFY] 9 - other x - don't know	5. ________ Specify if "8" ________ ________ ________ 1[58-59]	5. ________ Specify if "8" ________ ________ ________

6a. Did ________ or his family have to pay anything out-of-pocket for this hospital stay, excluding non-medical items such as phone, TV, etc.? 1 = yes 2 = no → [SKIP TO QUESTION 9a] 3 = don't know → [SKIP TO QUESTION 9a]	6a. ________ 1[60]	6a ________
6b. Approximately how much did ________ or his family have to pay out-of-pocket? [RECORD AMOUNT]	6b. ________ 1[61-62]	6b. ________
6c. Was the money that ________ had to pay out-of-pocket for: [READ RESPONSES] [RECORD ALL THAT APPLY] 1 = the cost of the hospital services 2 = the doctor's services while ________ was in the hospital 3 = some other cost → [SPECIFY] 4 = don't know	6c. ________ Specify if "3" ________ ________ ________ 1[63-64]	6c. ________ Specify if "3" ________ ________ ________
7a. Would Medicaid have paid for any of the out-of-pocket costs for ________'s hospital stay? 1 = yes 2 = no → [SKIP TO QUESTION 9a] 3 = don't know → [SKIP TO QUESTION 9a]	7a. ________ 1[65]	7a. ________
7b. Why did ________ pay for this hospital stay? [RECORD ALL THAT APPLY] 1 = lost/did not have Medicaid card 2 = wanted faster service 3 = wanted better service 4 = did not know at time if Medicaid would cover 5 = hospital/doctor refused to participate in Medicaid 6 = other [SPECIFY] 7 = don't know SKIP TO QUESTION 9a	7b. ________ Specify if "6" ________ ________ ________ 1[66-67]	7b. ________ Specify if "6" ________ ________ ________
8a. Has ________ ever been hospitalized? 1 = yes 2 = no → [SKIP TO QUESTION 9a] 3 = don't know → [SKIP TO QUESTION 9a]	8a. ________ 1[68]	8a. ________
8b. When was the last time ________ was hospitalized? [RECORD MONTH AND YEAR]	8b. mo. ________ year ________ 1[69-72]	8b. mo. ________ year ________

9a. Since January 1 of this year, that is, during 1973, has ________ been, or is he currently, a patient in a nursing home? [RECORD ALL THAT APPLY] 1 - yes, currently but temporarily 2 - yes, has been 3 - permanent resident → [INTERVIEWER: TERMINATE INTERVIEW] 4 - no → [SKIP TO QUESTION 10a] 5 - don't know → [SKIP TO QUESTION 10a]	9a. ________ 1[73]	9a ________
9b. How many times was ________ in a nursing home during 1973? [RECORD EXACT NUMBER. DO NOT INCLUDE CURRENT STAY IN NURSING HOME.]	9b. ________ 1[74]	9b. ________
10a. During 1972, that is, between January 1 and December 31 of last year, was ________ ever a patient in a nursing home? 1 - yes 2 - no → [SKIP TO INSTRUCTION C] 3 - don't know → [SKIP TO INSTRUCTION C]	10a. ________ 1[75]	10a. ________
10b. How many times? [RECORD EXACT NUMBER]	10b. ________ 1[76]	10b. ________
INSTRUCTION C [INTERVIEWER: IF INDIVIDUAL HAS ANSWERED "NO" OR "DON'T KNOW" TO BOTH QUESTIONS 9a AND 10a, THAT IS, IF HE HAS NEVER BEEN IN A NURSING HOME DURING 1972 OR 1973, SKIP TO QUESTION 16a. FOR EACH PERSON WHO HAS BEEN IN A NURSING HOME IN 1972 OR 1973, CONTINUE WITH INSTRUCTION D.]		
INSTRUCTION D [INTERVIEWER: RECORD THE NUMBER OF TIMES THAT EACH INDIVIDUAL HAS BEEN IN A NURSING HOME DURING 1972 AND 1973 TO THE RIGHT, EXCLUDING CURRENT VISITS. TO DO THIS, ADD RESPONSES IN QUESTIONS 9b AND 10b, AND RECORD TOTALS TO THE RIGHT. IF TOTAL IS ZERO, THAT IS, IF AN INDIVIDUAL'S CURRENT NURSING HOME STAY IS THE ONLY TIME HE HAS BEEN IN A NURSING HOME DURING 1972 OR 1973, SKIP TO SECTION D.]	INSTRUCTION D ________ 1[77]	INSTRUCTION D ________
11. The last time ________ was a patient in a nursing home, what was the reason he was there? [RECORD REASON]	11. ________ ________ ________ 2[12-13]	11. ________ ________ ________
12. How long was ________ in the nursing home on this visit? [RECORD EXACT ANSWER]	12. ________ 2[14-15]	12. ________
13. How was this stay in the nursing home paid for? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family → [SKIP TO QUESTION 14b] 4 - relative/friend not in family 5 - Medicare 6 - Veteran's Administration 7 - Workman's Compensation 8 - not paid → [ASK: Why not? SPECIFY] 9 - other + - don't know	13. ________ Specify if "8" ________ ________ ________ 2[16-17]	13. ________ Specify if "8" ________ ________ ________

14a. Did _________ or his family have to pay anything out-of-pocket for this nursing home stay? 1 = yes 2 = no → [SKIP TO SECTION D] 3 = don't know → [SKIP TO SECTION D]	14a. ________ 2[18]	14a. ________
14b. Approximately, how much did _________ or his family have to pay out-of-pocket? [RECORD AMOUNT]	14b. ________ 2[19-20]	14b. ________
15a. Would Medicaid have paid for any of this out-of-pocket cost? 1 = yes 2 = no → [SKIP TO SECTION D] 3 = don't know → [SKIP TO SECTION D]	15a. ________ 2[21]	15a. ________
15b. Why did _________ pay for this nursing home stay? [RECORD ALL THAT APPLY] 1 = lost/did not have Medicaid card 2 = wanted faster service 3 = wanted better service 4 = did not know at time if Medicaid would cover 5 = nursing home refused to participate in Medicaid 6 = other [SPECIFY] 7 = don't know [SKIP TO SECTION D]	15b. ________ Specify if "6" ________ ________ ________ 2[22-23]	15b. ________ Specify if "6" ________ ________ ________
16a. Has _________ ever been in a nursing home? 1 = yes 2 = no → [SKIP TO SECTION D] 3 = don't know → [SKIP TO SECTION D]	2[24]	
16b. When was the last time _________ was in a nursing home? [RECORD MONTH AND YEAR]	16b. mo. ________ year ________ 2[25-28]	16b. mo. ________ year ________
	2[29-32] always blank	

SECTION D - DENTAL CARE

1a. Does ______regularly go to a dentist? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 1c] 3 - don't know ⟶ [SKIP TO QUESTION 1c]	1a________ 2[31]	1a________
1b. Where does _______usually go for dental care? 1- private dentist's office or private clinic ⟶ [SPECIFY NAME AND ADDRESS IF CLINIC] 2- other clinic ⟶ [SPECIFY NAME AND ADDRESS IF CLINIC] 3- dental school ⟶ [SPECIFY NAME OF SCHOOL] 4- public or parochial school program 5- other ⟶ [SPECIFY] 6- don't know SKIP TO QUESTION 2a	1b.________ Specify if "1", "2", "3", or "5" ________ ________ ________ 2[32]	1b.________ Specify if "1" "2", "3", or "5" ________ ________ ________
1c. Why doesn't _______go to a dentist regularly? [RECORD ALL THAT APPLY] 1- lacks money 2- lacks transportation 3- does not know where or how to find dentist 4- too sick 5- not sick enough 6- afraid 7- too young 8- has dentures 9- other ⟶ [SPECIFY] +- don't know	1c. ________ Specify if "9" ________ ________ ________ 2[33-34]	1c. ________ Specify if "9" ________ ________ ________
2a. When was the last time that ________saw a dentist? 1- during 1973 2- during 1972 ⟶ [SKIP TO QUESTION 2c] 3- prior to 1972 ⟶ [SKIP TO QUESTION 7a] 4- never ⟶ [SKIP TO QUESTION 7a] 5- don't know ⟶ [SKIP TO QUESTION 7a]	2a. ________ 2[35]	2a. ________
2b. How many times has ______ seen a dentist since January 1 of this year? [RECORD NUMBER OF TIMES]	2b. ________ [36-37]	2b. ________
2c. How many times did ______ see a dentist last year, that is in 1972? [RECORD NUMBER OF TIMES]	2c. ________ 2[38-39]	2c. ________
3. The last time _______went to the dentist, what was the reason for the visit? [RECORD ALL THAT APPLY] 1- general checkup/cleaning 2- cavity repair/filling 3- extraction 4- braces/straightening 5- false teeth/dentures 6- oral surgery 7- gum disease/problems 8- other ⟶ [SPECIFY] 9- don't know	3.________ Specify if "8" ________ ________ ________ 2[40-41]	3. ________ Specify if "8" ________ ________ ________

4. How was this visit to the dentist paid for? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family ⟶ [SKIP TO QUESTION 5b] 4 - relative/friend not in family 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid ⟶ [ASK: Why not? SPECIFY] 9 - other + - don't know	4.________ Specify if "9" ________ ________ ________ 2[42-43]	4.________ Specify if "9" ________ ________ ________
5a. Did ________ or his family have to pay anything out-of-pocket for this visit? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 7a] 3 - don't know ⟶ [SKIP TO QUESTION 7a]	5a.________ 2[44]	5a.________
5b. Approximately how much did ________ or his family have to pay out-of-pocket? [RECORD AMOUNT]	5b.________ 2[45-46]	5b.________
5c. Was any part of this money paid for dentures? 1 - yes, all of it 2 - yes, some of it 3 - no 4 - don't know	5c.________ 2[47]	5c.________
6a. Would Medicaid have paid for any of the out-of-pocket cost for this visit? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 7a] 3 - don't know ⟶ [SKIP TO QUESTION 7a]	6a.________ 2[48]	6a.________
6b. Why did ________ pay for this visit? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other ⟶ [SPECIFY] 7 - don't know	6b.________ Specify if "6" ________ ________ ________ 2[49-50]	6b.________ Specify if "6" ________ ________ ________
7a. Since January 1, 1972, were there any times when ________ needed to see a dentist but for some reason did not? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 9a] 3 - don't know ⟶ [SKIP TO QUESTION 9a]	7a.________ 2[51]	7a.________
7b. How many different times since January 1, 1972, did ________ need to see a dentist but did not do so? [RECORD NUMBER OF TIMES]	7b.________ 2[52-53	7b.________

8a. The last time ________ needed to see a dentist but did not do so, what was the reason? [RECORD EXACT REASON]	8a.________ 2[54-55]	8a.________
8b. And why didn't ________ see a dentist on this occasion? [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where or how to find a dentist 4 - too sick 5 - not sick enough 6 - afraid 7 - had to wait too long to see dentist/get appointment 8 - other ⟶ [SPECIFY] 9 - don't know	8b.________ Specify if "8" ________ ________ ________ 2[56-57]	8b.________ Specify if "8" ________ ________ ________
9a. Does ________ currently have any dental problems? 1 - yes 2 - no ⟶ [SKIP TO SECTION E] 3 - don't know ⟶ [SKIP TO SECTION E]	9a.________ 2[58]	9a.________
9b. What are these problems? [CHECK ALL THAT APPLY] 1 - general checkup/cleaning 2 - cavity repair/filling 3 - extraction 4 - braces/straightening 5 - false teeth/dentures 6 - oral surgery 7 - gum disease/problems 8 - other ⟶ [SPECIFY] 9 - don't know	9b.________ Specify if "8" ________ ________ ________ 2[59-60]	9b.________ Specify if "8" ________ ________ ________

2[61-64] always blank

SECTION E - EYE CARE

[NOTE: ASK QUESTION 1a OF EVERY ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH THE OTHER QUESTIONS IN THIS SECTION.]

1a. Since January 1, 197[illegible], has ________ obtained eye glasses? 1 = yes 2 = no ⟶ [SKIP TO QUESTION 5] 3 = don't know ⟶ [SKIP TO QUESTION 5]	1a. ________ 2[65]	1a. ________
1b. How many times [RECORD EXACT NUMBER]	1b. ________ 2[66]	1b. ________
1c. The last time that ________ obtained glasses, how did he obtain them? That is, were they [READ RESPONSES] 1 = newly prescribed by a doctor? 2 = replacing a pair of glasses that were previously prescribed by a doctor? OR 3 = obtained without a doctor's prescription	1c. ________ 2[67]	1c. ________
2a. Where did ________ get his glasses? 1 = from the doctor himself 2 = private clinic ⟶ [SPECIFY NAME AND ADDRESS OF CLINIC] 3 = non-private clinic ⟶ [SPECIFY NAME AND ADDRESS OF CLINIC] 4 = another eye specialist 5 = glasses company or optician 6 = local volunteer organization ⟶ [SPECIFY NAME AND ADDRESS] 7 = other ⟶ [SPECIFY] 8 = don't know	2a. ________ Specify if "2", "3", "6" or "7" ________ ________ ________ 2[68]	2a. ________ Specify if "2", "3", "6", or "7" ________ ________ ________
2b. How were ________'s glasses paid for? [RECORD ALL THAT APPLY] 1 = Medicaid 2 = other health insurance 3 = self and/or family ⟶ [SKIP TO QUESTION 3b] 4 = relative/friend not in household 5 = Medicare 6 = Veteran's Administration 7 = Workmen's Compensation 8 = not paid ⟶ [ASK: Why not? SPECIFY] 9 = other + = don't know	2b. ________ Specify if "8" ________ ________ ________ 2[69-70]	2b. ________ Specify if "8" ________ ________ ________
3a. Did ________ or his family have to pay anything out-of-pocket for these glasses? 1 = yes 2 = no ⟶ [SKIP TO QUESTION 5] 3 = don't know ⟶ [SKIP TO QUESTION 5]	3a. ________ 2[71]	3a. ________
3b. Approximately how much did ________ or his family have to pay for these glasses? [RECORD AMOUNT]	3b. ________ 2[72-73]	3b. ________

4a. Would Medicaid have paid for any of the out-of-pocket cost for ________'s glasses? 1 - yes 2 - no → [SKIP TO QUESTION 5] 3 - don't know → [SKIP TO QUESTION 5]	4a. ________ 2[74]	4a. ________
4b. Why did ________ pay for his glasses? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other [SPECIFY] 7 - don't know	4b. ________ Specify if "6" ________ ________ ________ 2[75-76]	4b. ________ Specify if "6" ________ ________ ________
5. Since January 1, 1972, that is, the beginning of last year, has ________ ever needed glasses but not obtained them? 1 - yes 2 - no → [SKIP TO QUESTION 8] 3 - don't know → [SKIP TO QUESTION 8]	5. ________ 2[77]	5. ________
6. On the last occasion that ________ needed but did not obtain glasses, were they prescribed by a doctor? 1 - yes 2 - no 3 - don't know	6. ________ 2[78]	6. ________
7. On the last occasion that ________ needed but did not obtain glasses, why didn't ________ get the glasses he needed [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where to get them 4 - too sick 5 - not sick enough 6 - afraid 7 - had to wait too long to see doctor/get appointment 8 - other [SPECIFY] 9 - don't know	7. ________ Specify if "8" ________ ________ ________ 3[12-13]	7. ________ Specify if "8" ________ ________ ________
8. When was the last time that ________ either saw a doctor, or received advice from a doctor over the phone, about an eye or a vision problem? 1 - during 1973 2 - during 1972 → [SKIP TO QUESTION 17a] 3 - prior to 1972 → [SKIP TO QUESTION 17a] 4 - never → [SKIP TO QUESTION 17a] 5 - don't know → [SKIP TO QUESTION 17a]	8. ________ 3[14]	8. ________
9a. How many times has ________ seen a doctor about eye/vision problems since January 1 of this year? [RECORD NUMBER OF TIMES]	9a. ________ 3[15-16]	9a. ________
9b. How many times has ________ received advice from a doctor about eye/vision problems over the phone since January 1 of this year? [RECORD NUMBER OF TIMES]	9b. ________ 3[17-18]	9b. ________

10. The last time ________ saw a doctor about eye/vision problems, what did he say was wrong? [RECORD EXACT REASON]	10.________ 3[19-20]	10.________
11. Where did ________ see the doctor about his eye or vision problem? 1 - at home 2 - private doctor's office or private clinic → [SPECIFY NAME AND ADDRESS IF CLINIC] 3 - hospital emergency room/ hospital out-patient clinic → [SPECIFY HOSPITAL] 4 - non-private clinic → [SPECIFY NAME AND ADDRESS] 5 - other → [SPECIFY]	11.________ Specify if "2" "3", "4" or "5" ________ ________ ________ 3[21]	11.________ Specify if "2" "3", "4" or "5" ________ ________ ________
12. On this visit, did the doctor give ________ an injection or shot of any sort? 1 - yes 2 - no 3 - don't know	12. ________ 3[22]	12. ________
13. On this visit, did the doctor give ________ a prescription for medicine? Did he give him any medicine to take home, like a free sample? Did he recommend any non-prescription medicine for ________ to take? [RECORD ALL THAT APPLY] 1 - gave a prescription 2 - gave medicine to take home 3 - recommended non-prescription medicine 4 - none of these 5 - don't know	13. ________ 3[23-25]	13. ________
14. How was the doctor paid on this visit? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family → [SKIP TO QUESTION 15b] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid → [ASK: Why not? SPECIFY] 9 - other + - don't know	14. ________ Specify if "8" ________ ________ ________ 3[26-27]	14. ________ Specify if "8" ________ ________ ________
15a. Did ________ or his family have to pay anything out-of-pocket for this visit? 1 - yes 2 - no → [SKIP TO QUESTION 17a] 3 - don't know → [SKIP TO QUESTION 17a]	15a. ________ 3[28]	15a. ________
15b. Approximately how much did ________ or his family have to pay? [RECORD AMOUNT]	15b.________ 3[29-30]	15b.________
15c. Was any of this money paid for eyeglasses? 1 - yes, all of it → [SKIP TO QUESTION 17a] 2 - yes, part of it 3 - no 4 - don't know	15c. ________ 3[31]	15c. ________

16a. Would Medicaid have paid for any of the out-of-pocket costs for this visit? 1 - yes 2 - no → [SKIP TO QUESTION 17a] 3 - don't know → [SKIP TO QUESTION 17a]	16a. ________ 3[32]	16a. ________
16b. Why did ________ pay for this visit? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other [SPECIFY] 7 - don't know	16b. ________ Specify if "6" ________ ________ ________ 3[33-34]	16b. ________ Specify if "6" ________ ________ ________
17a. Since January 1, 1973, that is, since the beginning of this year, were there any times when ________ needed to see a doctor about eye/vision problems but for some reason did not? 1 - yes 2 - no → [SKIP TO SECTION F] 3 - don't know → [SKIP TO SECTION F]	17a. ________ 3[35]	17a. ________
17b. How many different times did ________ need to see a doctor about eye/vision problems but did not do so? [RECORD NUMBER OF TIMES]	17b.________ 3[36]	17b.________
18a. The last time ________ needed to see a doctor about eye/vision problems but did not see one, what was the reason for wanting to see the doctor? [RECORD REASONS]	18a.________ ________ ________ 3[37-38]	18a.________ ________ ________
18b. And why didn't ________ see a doctor on this occasion? [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where to find a doctor 4 - too sick 5 - not sick enough 6 - afraid 7 - had to wiat too long to see doctor/get appointment 8 - other [SPECIFY] 9 - don't know	18b.________ Specify if "8" ________ ________ ________ 3[39-40]	18b.________ Specify if "8" ________ ________ ________
	3[41-44] always blank	

SECTION F - HEARING [NOTE: ASK QUESTION 1a AND 1b, OF EVERY ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH OTHER QUESTIONS.] 1a. Does anyone in your household have a hearing aid? ☐1 yes ☐2 no ⟶ [SKIP TO QUESTION 7a] ☐3 don't know ⟶ [SKIP TO QUESTION 7a]	3[45]	
1b. Who? 1 = has a hearing aid 2 = does not have a hearing aid ⟶ [SKIP TO QUESTION 7a]	1b. ______ 3[46]	1b. ______
1c. Was it prescribed by a physician? 1 = yes 2 = no 3 = don't know	1c. ______ 3[47]	1c. ______
2. When did ________ obtain his hearing aid? [RECORD MONTH AND YEAR] [INTERVIEWER: IF DATE GIVEN IS PRIOR TO 1972, SKIP TO QUESTION 7a.]	2. mo. ______ year ______ 3[48-51]	2. mo. ______ year ______
3. Where did ________ get his hearing aid? 1 = private doctor/ private clinic ⟶ [SPECIFY NAME AND ADDRESS IF CLINIC] 2 = non-private clinic ⟶ [SPECIFY NAME AND ADDRESS] 3 = local volunteer organization ⟶ [SPECIFY NAME AND ADDRESS] 4 = commercial outlet 5 = other ⟶ [SPECIFY] 6 = don't know	3. ______ Specify if "1", "2", "3" or "5" ______ ______ ______ 3[52]	3. ______ Specify if "1", "2", "3" or "5" ______ ______ ______
4. How was ________'s hearing aid paid for? [RECORD ALL THAT APPLY] 1 = Medicaid 2 = other health insurance 3 = self and/or family ⟶ [SKIP TO QUESTION 5b] 4 = relative/friend not in household 5 = Medicare 6 = Veteran's Administration 7 = Workmen's Compensation 8 = not paid ⟶ [ASK: Why not? SPECIFY] 9 = other + = don't know	4. ______ Specify if "8" ______ ______ ______ 3[53-54]	4. ______ Specify if "8" ______ ______ ______
5a. Did ________ or his family have to pay anything out-of-pocket for this hearing aid? 1 = yes 2 = no ⟶ [SKIP TO QUESTION 7a] 3 = don't know ⟶ [SKIP TO QUESTION 7a]	5a. ______ 3[55]	5a. ______
5b. Approximately how much did ________ or his family have to pay out-of-pocket? [RECORD AMOUNT]	5b. ______ 3[56-58]	5b. ______

F-1

6a. Would Medicaid have covered any of the out-of-pocket costs for ________'s hearing aid? 1 - yes 2 - no 3 - don't know	6a. ________ 3[59]	6a. ________
6b. Why did ________ or his family pay for this hearing aid? [RECORD ALL] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other [SPECIFY] 7 - don't know	6b. ________ Specify if "6" ________ ________ ________ 3[60-61]	6b. ________ Specify if "6" ________ ________ ________
7a. Since January 1, 1972, that is, the beginning of last year, had anyone in your household ever felt that he needed a hearing aid but for some reason did not obtain one? ☐1 yes ☐2 no → [SKIP TO QUESTION 10] ☐3 don't know → [SKIP TO QEUSTION 10]	3[62]	
7b. Who? 1 - needed a hearing aid 2 - did not need a hearing aid [INTERVIEWER: ASK QUESTIONS 8 AND 9 ONLY ABOUT EACH HOUSEHOLD MEMBER WHO HAS FELT HE NEEDED A HEARING AID BUT NEVER OBTAINED ONE.]	7b. ________ 3[63]	7b. ________
8. On the last occasion that ________ needed but did not obtain a hearing aid, was it prescribed by a doctor? 1 - yes 2 - no → [SKIP TO QUESTION 10] 3 - don't know → [SKIP TO QUESTION 10]	8. ________ 3[64]	8. ________
9. Why didn't ________ get a hearing aid? [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where to get one 4 - too sick 5 - not sick enough 6 - afraid 7 - had to wait too long to see doctor/get appointment 8 - other [SPECIFY] 9 - don't know	9. ________ Specify if "8" ________ ________ ________ 3[65-66]	9. ________ Specify if "8" ________ ________ ________
[INTERVIEWER: ASK QUESTION 10 ABOUT EVERY ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH OTHER QUESTIONS.] 10. When was the last time that ________ saw a doctor or received advice from a doctor over the phone about an ear or a hearing problem? 1 - during 1973 2 - during 1972 → [SKIP TO QUESTION 19a] 3 - prior to 1972 → [SKIP TO QUESTION 19a] 4 - never → [SKIP TO QUESTION 19a] 5 - don't know → [SKIP TO QUESTION 19a]	10. ________ 3[67]	10. ________

11a. How many times has ________ seen a doctor about an ear/hearing problem since January 1 of this year? [RECORD NUMBER OF TIMES]	11a. ________ 3[68]	11a. ________
11b. How many times has ________ received medical advice from a doctor about an ear/hearing problem over the phone since January 1 of this year? [RECORD NUMBER OF TIMES]	11b. ________ 3[69]	11b. ________
12. The last time ________ saw a doctor about an ear or hearing problem, what did he say was wrong? [RECORD EXACT REASON]	12. ________ ________ ________ 3[70-71]	12. ________ ________ ________
13. Where did ________ see the doctor? 1 = at home 2 = private doctor's office or private clinic → [SPECIFY NAME AND ADDRESS IF CLINIC] 3 = hospital emergency room/ hospital outpatient clinic → [SPECIFY HOSPITAL] 4 = non-private → [SPECIFY NAME AND ADDRESS] 5 = other → [Specify]	13. ________ Specify if "2", "3", "4" or "5" ________ ________ ________ 3[72]	13. ________ Specify if "2", "3", "4" or "5" ________ ________ ________
14. On this visit, did the doctor give ________ an injection or shot of any sort? 1 = yes 2 = no 3 = don't know	14. ________ 3[73]	14. ________
15. On this visit, did the doctor give ________ a prescription? Did he give him any medicine to take home, like a free sample? Did he recommend any non-prescription medicine for ________ to take? [RECORD ALL THAT APPLY] 1 = gave a prescription 2 = gave medicine to take home 3 = recommend non-prescription medicine 4 = none of these 5 = don't know	15. ________ 3[74-76]	15. ________
16. How was the doctor paid on this visit? [LIST ALL THAT APPLY] 1 = Medicaid 2 = other health insurance 3 = self and/or family → [SKIP TO QUESTION 17b] 4 = relative/friend not in household 5 = Medicare 6 = Veteran's Administration 7 = Workmen's Compensation 8 = not paid → [ASK: Why not? SPECIFY] 9 = other + = don't know	16. ________ Specify if "8" ________ ________ ________ 3[77-78]	16. ________ Specify if "8" ________ ________ ________
17a. Did ________ or his family have to pay anything out-of-pocket for this visit 1 = yes 2 = no → [SKIP TO QUESTION 19a] 3 = don't know → [SKIP TO QUESTION 19a]	17a. ________ 4[12]	17a. ________
17b. Approximately how much did ________ or his family have to pay out-of-pocket? [RECORD AMOUNT]	17b. ________ 4[13-14]	17b. ________

17c. Was any part of this out-of-pocket cost for a hearing aid? 1 = yes, all of it [SKIP TO QUESTION 19a] 2 = yes, part of it 3 = no 4 = don't know	17c. ______ 4[15]	17c. ______
18a. Would Medicaid have paid for any of the out-of-pocket cost for ________'s visit to the doctor? 1 = yes 2 = no → [SKIP TO QUESTION 19a] 3 = don't know → [SKIP TO QUESTION 19a]	18a. ______ 4[16]	18a. ______
18b. Why did ________ pay for this visit? [RECORD ALL THAT APPLY] 1 = lost/did not have Medicaid card 2 = wanted faster service 3 = wanted better service 4 = did not know at time if Medicaid would cover 5 = doctor refused to participate in Medicaid 6 = other [SPECIFY] 7 = don't know	18b. ______ Specify if "6" ______ ______ ______ 4[17-18]	18b. ______ Specify if "6" ______ ______ ______
19a. Since January 1, 1973, that is, since the beginning of this year, were there any times when ________ felt he needed to see a doctor about an ear/hearing problem but for some reason did not? 1 = yes 2 = no → [SKIP TO SECTION G] 3 = don't know → [SKIP TO SECTION G]	19a. ______ 4[19]	19a. ______
19b. How many different times did ________ need to see a doctor about an ear/hearing problem but did not do so? [RECORD NUMBER OF TIMES]	19b. ______ 4[20]	19b. ______
20a. On the last time ________ needed to see a doctor about ear/hearing problem but did not see one, what was the reason for needing to see the doctor? [RECORD EXACT REASON]	20a. ______ ______ ______ 4[21-22]	20a. ______ ______ ______
20b. And why didn't ________ see a doctor on this occasion? [RECORD ALL THAT APPLY] 1 = lacked money 2 = lacked transportation 3 = did not know how or where to find a doctor 4 = too sick 5 = not sick enough 6 = afraid 7 = had to wait too long to see doctor/get appointment 8 = other [SPECIFY] 9 = don't know	20b. ______ Specify if "8" ______ ______ ______ 4[23-24]	20b. ______ Specify if "8" ______ ______ ______
	4[25-28] always blank	

SECTION G - PHYSICIAN'S SERVICES INTERVIEWER NOTE: This section refers to all physician visits excluding the following: (a) Visits to a dentist; (b) visits to a Physician about ear or eye problems; and (c) those times that an individual may have seen a Physician while he was an in-patient in a hospital. These visits have already been covered in previous sections of the questionnaire, and should not be repeated here. [INTERVIEWER: ASK QUESTION 1 ABOUT EACH ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH OTHER QUESTIONS.]		
1. When was the last time that _________ either saw a doctor or received medical advice from a doctor over the phone, other than making an appointment? Do not include any times you might have seen a doctor while an overnight patient in a hospital or any visits for eye, ear or dental problems you have already told me about? [RECORD MONTH AND YEAR] [INTERVIEWER: IF LAST VISIT OR PHONE CALL WAS BEFORE JANUARY 1, 1973, SKIP TO QUESTION 20]	1. mo. ________ year ________ 4[29-32]	1. mo. ________ year ________
2a. How many times has _________ seen a doctor since January 1, 1973? [RECORD NUMBER OF TIMES]	2a. ________ 4[33-34]	2a. ________
2b. How many times has _________ received medical advice from a doctor over the phone since January 1 of this year? [RECORD NUMBER OF TIMES]	2b. ________ 4[35-36]	2b. ________
[NOTE: ASK QUESTION 3 ABOUT EACH ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH OTHER QUESTIONS.] 3. Does _________ have any medical condition or health problem for which he sees a doctor regularly? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 13] 3 - don't know ⟶ [SKIP TO QUESTION 13]	3. ________ 4[37]	3. ________
4. What is this health problem(s) [RECORD ALL THAT APPLY] 1 - heart disease/problem 2 - diabetes 3 - hypertension (high blood pressure) 4 - lung problems (emphysema, bronchitis, asthma) 5 - arthritis 6 - allergies 7 - urinary tract (chronic kidney) 8 - liver disease (cirrhosis) 9 - other [SPECIFY] + - don't know	4. ________ Specify if "9" ________ ________ ________ 4[38-39]	4. ________ Specify if "9" ________ ________ ________
5. How often does _________ see the doctor for this (these) condition(s)? 1 - less than once a month 2 - once a month 3 - twice a month 4 - once a week 5 - more than once a week 6 - other ⟶ [SPECIFY EXACT ANSWER] 7 - don't know	5. ________ Specify if "6" ________ ________ ________ 4[40]	5. ________ Specify if "6" ________ ________ ________

6. Where does ________usually see the doctor(s) for this (these) conditions? [RECORD ALL THAT APPLY] 1 - at home 2 - private doctor/ private clinic ——→ [SPECIFY NAME AND ADDRESS IF CLINIC] 3 - hospital emergency room/ hospital out-patient clinic → [SPECIFY HOSPITAL] 4 - non-private clinic ——→ [SPECIFY NAME AND ADDRESS] 5 - other ——→ [SPECIFY] 6 - don't know	6. ________ Specify if "2" "3", "4" or "5" ________ ________ ________ 4[41-42]	6. ________ Specify if "2" "3", "4" or "5" ________ ________ ________
7. Does the doctor usually give ________an injection for this (any of these) condition(s)? 1 - yes 2 - no 3 - don't know	7. ________ 4[43]	7. ________
8. For this (any of these) condition(s) does the doctor usually give ________ a prescription? Does he usually give him any medicine to take home, like a free sample? Does he usually recommend any non-prescription medicine for ________ to take for this condition? [RECORD ALL THAT APPLY] 1 - gives prescription 2 - gives medicine to take home 3 - recommends non-prescription medicine 4 - none of these 5 - don't know	8. ________ 4[44-46]	8. ________
9. How is the doctor usually paid on these visits? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family ——→ [SKIP TO QUESTION 10b] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid ——→ [ASK: Why not SPECIFY] 9 - other + - don't know	9. ________ Specify if "8" ________ ________ ________ 4[47-48]	9. ________ Specify if "8" ________ ________ ________
10a. Does ________or his family have to pay anything out-of-pocket for these visits? 1 - yes 2 - no ——→ [SKIP TO QUESTION 12] 3 - don't know ——→ [SKIP TO QUESTION 12]	10a. ________ 4[49]	10a. ________
10b. Approximately how much does ________or his family have to pay out-of-pocket for *each* visit? [RECORD AMOUNT]	10b.________ 4[50-51]	10b.________

11a. Would Medicaid pay for any of these out-of-pocket costs? 1 = yes 2 = no → [SKIP TO QUESTION 12] 3 = don't know → [SKIP TO QUESTION 12]	11a. ______ 4[52]	11a. ______
11b. Why does ______ pay for these visits? [RECORD ALL THAT APPLY] 1 = lost/did not have Medicaid card 2 = wanted faster service 3 = wanted better service 4 = did not know at time if Medicaid would cover 5 = provider refused to participate in Medicaid 6 = other [SPECIFY] 7 = don't know	11b. ______ Specify if "6" ______ ______ ______ 4[53-54]	11b. ______ Specify if "6" ______ ______ ______
12. The last time ______ saw a doctor, was it for this (one of these) regular/chronic medical problem(s)? 1 = yes → [SKIP TO QUESTION 20] 2 = no 3 = don't know	12. ______ 4[55]	12. ______
13. The last time ______ saw a doctor, what did he say was wrong? [RECORD EXACT REASON]	13. ______ ______ ______ 4[56-57]	13. ______ ______ ______
14. Where did ______ see the doctor on this last visit? 1 = at home 2 = private doctor's office/ private clinic → [SPECIFY NAME AND ADDRESS IF CLINIC] 3 = hospital emergency room/ hospital out-patient clinic → [SPECIFY HOSPITAL] 4 = non-private clinic → [SPECIFY NAME AND ADDRESS] 5 = other → [SPECIFY]	14. ______ Specify if "2", "3", "4" or "5" ______ ______ ______ 4[58]	14. ______ Specify if "2", "3", "4" or "5" ______ ______ ______
15. On this visit, did the doctor give ______ an injection or shot of any sort? 1 = yes 2 = no 3 = don't know	15. ______ 4[59]	15. ______
16. On this visit, did the doctor give ______ a prescription? Did he give him any medicine to take home, like a free sample? Did he recommend any non-prescription medicine for ______ to take? [RECORD ALL THAT APPLY] 1 = gave a prescription 2 = gave medicine to take home 3 = recommended non-prescription medicine 4 = none of these 5 = don't know	16. ______ 4[60-62]	16. ______

17. How was the doctor paid on this visit? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family ——→ [SKIP TO QUESTION 18b] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid ——→ [ASK: Why not? SPECIFY] 9 - other + - don't know	17. ________ Specify if "8" ________ ________ ________ 4[63-64]	17. ________ Specify if "8" ________ ________ ________
18a. Did ________ or his family have to pay anything out-of-pocket for this visit? 1 - yes 2 - no ——→ [SKIP TO QUESTION 20] 3 - don't know ——→ [SKIP TO QUESTION 20]	18a. ________ 4[65]	18a. ________
18b. Approximately how much did ________ or his family have to pay? [RECORD AMOUNT]	18b. ________ 4[66-67]	18b. ________
19a. Would Medicaid have paid for any of the out-of-pocket costs for this visit? 1 - yes 2 - no ——→ [SKIP TO QUESTION 20] 3 - don't know ——→ [SKIP TO QUESTION 20]	19a. ________ 4[68]	19a. ________
19b. Why did ________ pay for this visit? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other [SPECIFY] 7 - don't know	19b. ________ Specify if "6" ________ ________ ________ 4[69-70]	19b. ________ Specify if "5" ________ ________ ________
20. Excluding dentists and eye and ear specialists, does ________ have a regular doctor or group of doctors? 1 - yes ——→ [SKIP TO QUESTION 21b] 2 - no 3 - don't know	20. ________ 4[71]	20. ________
21a. Does ________ usually go to a doctor when he needs medical attention? 1 - yes 2 - no ——→ [SKIP TO QUESTION 21c] 3 - don't know ——→ [SKIP TO QUESTION 21c]	21a. ________ 4[72]	21a. ________
21b. Where does ________ usually go to see the doctor? 1 - no particular place 2 - private doctor's office/ private clinic ——→ [SPECIFY NAME AND ADDRESS IF CLINIC] 3 - hospital emergency room/ hospital out-patient clinic → [SPECIFY HOSPITAL] 4 - non-private clinic ——→ [SPECIFY NAME AND ADDRESS] 5 - other ——→ [SPECIFY] 6 - don't know SKIP TO QUESTION 22a	21b. ________ Specify if "2", "3", "4" or "5" ________ ________ ________ 4[73]	21b. ________ Specify if "2", "3", "4" or "5" ________ ________ ________

21c. Why doesn't ________ go to a doctor when he needs to? [RECORD ALL THAT APPLY] 1 - lacks money 2 - lacks transportation 3 - doesn't know how or where to find a doctor 4 - too sick 5 - not sick enough 6 - afraid 7 - have to wait too long to see doctor/get appointment 8 - other [SPECIFY] 9 - don't know	21c. ________ Specify if "8" ________ ________ ________ 4[74-75]	21c. ________ Specify if "8" ________ ________ ________
22a. Since January 1, 1973, that is, since the beginning of this year were there any times when ________ needed to see a doctor but for some reason did not? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 24b] 3 - don't know ⟶ [SKIP TO QUESTION 24b]	22a. ________ 4[76]	22a. ________
22b. How many different times did ________ need to see a doctor but did not do so? [RECORD NUMBER OF TIMES]	22b. ________ 5[12-13]	22b. ________
23a. The last time ________ needed to see a doctor but did not see one, what was the medical problem? [RECORD EXACT PROBLEM]	23a. ________ ________ 5[14-15]	23a. ________ ________
23b. And why didn't ________ see a doctor on this occasion? [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where or how to find a doctor 4 - too sick 5 - not sick enough 6 - afraid 7 - had to wait too long to see doctor/get appointment 8 - other [SPECIFY] 9 - don't know	23b. ________ Specify if "8" ________ ________ ________ 5[16-17]	23b. ________ Specify if "8" ________ ________ ________
24a. Has ________ ever been to the doctor for a routine medical checkup, that is, has he ever been to a doctor for a checkup even though nothing was wrong or bothering him? 1 - yes 2 - no ⟶ [SKIP TO SECTION H] 3 - don't know ⟶ [SKIP TO SECTION H]	24a. ________ 5[18]	24a. ________
24b. When was the last time ________ had a routine medical checkup? [RECORD MONTH AND YEAR]	24b.mo.________ year________	24b.mo.________ year________
	5[19-22] 5[23-26] always blank	

SECTION H - PRESCRIPTION AND NON-PRESCRIPTION DRUGS [NOTE: ASK QUESTION 1 ABOUT EACH ELIGIBLE INDIVIDUAL BEFORE CONTINUING WITH THE REST OF THIS SECTION.]		
1. Has ________ ever received any prescriptions for medicine from a doctor? 1 - yes 2 - no → [SKIP TO QUESTION 10a] 3 - don't know → [SKIP TO QUESTION 10a]	1. ________ 5[27]	1. ________
2. Since January 1 of this year, 1973, has ________ received any new prescriptions for medicine from a doctor? 1 - yes 2 - no → [SKIP TO QUESTION 4] 3 - don't know → [SKIP TO QUESTION 4]	2. ________ 5[28]	2. ________
3a. How many different prescriptions did ________ receive? [RECORD EXACT NUMBER]	3a. ________ 5[29-30]	3a. ________
3b. How many of these prescriptions were filled? [RECORD EXACT NUMBER]	3b. ________ 5[31-32]	3b. ________
3c. Were all these prescriptions refilled as needed? 1 - yes 2 - no 3 - don't know	3c. ________ 5[33]	3c. ________
[INTERVIEWER: FROM QUESTIONS 3a, 3b AND 3c, DETERMINE IF EACH INDIVIDUAL HAS BEEN GIVEN PRESCRIPTIONS WHICH HE DID NOT HAVE FILLED AT ALL OR DID NOT REFILL AS NEEDED. FOR EACH INDIVIDUAL WHOSE PRESCRIPTIONS WERE NOT FILLED OR REFILLED AS NEEDED, ASK QUESTION 3d. OTHERWISE, SKIP TO QUESTION 3e.]		
3d. Why didn't ________ have all of his prescriptions filled or refilled when he needed them? [RECORD ALL ANSWERS THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where or how to get it filled 4 - too sick 5 - not sick enough 6 - afraid 7 - other [SPECIFY] 8 - don't know	3d. ________ Specify if "7" ________ ________ ________ 5[34-35]	3d. ________ Specify if "7" ________ ________ ________
3e. What conditions were ________'s prescriptions for? [RECORD EXACT ANSWERS]	3e. ________ ________ ________ 5[36-37]	3e. ________ ________ ________
4. Is ________ currently taking any other medicines which were prescribed by a doctor prior to the beginning of this year? That is, prior to January 1, 1973? 1 - yes 2 - no → [SKIP TO QUESTION 6] 3 - don't know → [SKIP TO QUESTION 6]	4. ________ 5[38]	4. ________

5a. How many? [RECORD EXACT NUMBER]	5a. ________ 5[39-40]	5a. ________
5b. What medical conditions are these prescription medications for? [RECORD EXACT ANSWERS]	5b. ________ ________ ________ 5[41-42]	5b. ________ ________ ________
6. How are ________'s prescriptions usually paid for? [RECORD ALL THAT APPLY] 1 = Medicaid 2 = other health insurance 3 = self and/or family → [SKIP TO QUESTION 7b] 4 = relative/friend not in household 5 = Medicare 6 = Veteran's Administration 7 = Workmen's Compensation 8 = not paid → [ASK: Why not? SPECIFY] 9 = other + = don't know	6. ________ Specify if "8" ________ ________ ________ 5[43-44]	6. ________ Specify if "8" ________ ________ ________
7a. Does ________ or his family have to pay anything out-of-pocket for his prescriptions? 1 = yes 2 = no → [SKIP TO QUESTION 9] 3 = don't know → [SKIP TO QUESTION 9]	7a. ________ 5[45]	7a. ________
7b. Approximately how much has ________ or his family paid out-of-pocket for all of ________'s prescription medicines since the beginning of this year, that is, since January 1, 1973. [RECORD AMOUNT]	7b. ________ 5[46-47]	7b. ________
8a. Would Medicaid have paid for any of the out-of-pocket costs for ________'s prescriptions? 1 = yes 2 = no → [SKIP TO QUESTION 9] 3 = don't know → [SKIP TO QUESTION 9]	8a. ________ 5[48]	8a. ________
8b. Why did ________ pay for these prescriptions? [RECORD ALL THAT APPLY] 1 = lost/did not have Medicaid card 2 = wanted faster service 3 = wanted better service 4 = did not know at time if Medicaid would cover 5 = provider refused to participate in Medicaid 6 = other [SPECIFY] 7 = don't know	8b. ________ Specify if "6" ________ ________ ________ 5[49-50]	8b. ________ Specify if "6" ________ ________ ________
9. Where does ________ usually get his prescriptions filled?? [RECORD ALL THAT APPLY] 1 = drug store 2 = hospital pharmacy 3 = other [SPECIFY] 4 = don't know	9. ________ Specify if "4" ________ ________ ________ 5[51-52]	9. ________ Specify if "4" ________ ________ ________

10a. Since January 1 of this year, 1973, has _________ used, or is he currently using any non-prescription medicine? 1 = yes 2 = no ⟶ [SKIP TO SECTION I] 3 = don't know ⟶ [SKIP TO SECTION I]	10a. _____________ 5[53]	10a. _____________
10b. Who recommended that _________ use these non-prescription medicines? [RECORD ALL THAT APPLY] 1 = physician 2 = friend or relative 3 = self 4 = media (radio, TV, newspaper, etc.) 5 = other [SPECIFY]	10b. _____________ Specify if "5" _____________ _____________ _____________ 5[54-55]	10b. _____________ Specify if "5" _____________ _____________ _____________
10c. Approximately how much has _________ or his family paid out-of-pocket for all of _________'s non-prescription medicines since the beginning of this year, that is, since January 1, 1973? [RECORD AMOUNT]	10c. _____________ 5[56-57]	10c. _____________
	5[58-61] always blank	

SECTION I - HOME HEALTH CARE

1. Has anyone in your household received home health care services such as a visiting nurse or health aide since January 1, 1972? ☐$_1$ yes ☐$_2$ no ——→ [SKIP TO QUESTION 4a] ☐$_3$ don't know ——→ [SKIP TO QUESTION 4a]	5[62]	
2. Who in your household has received these services? 1 = has received services 2 = has not received services	2. ________ 5[63]	2. ________
3. What kinds of services have been or are being received by your household? [CHECK ALL THAT APPLY] ☐$_1$ visiting nurse services ☐$_2$ domestic aid ☐$_3$ other [SPECIFY ALL MENTIONED] ________ ________ ________	5[64-65]	
4a. Does someone in your household need any home health services but in fact is not receiving them? ☐$_1$ yes ☐$_2$ no ——→ [SKIP TO QUESTION 6]	5[66]	
4b. Who needs these services? 1 = needs services 2 = does not need services	4b. ________ 5[67]	4b. ________
[INTERVIEWER: ASK QUESTIONS 5a AND 5b ONLY ABOUT THOSE HOUSEHOLD MEMBERS THE RESPONDENT FEELS SHOULD BE RECEIVING HOME HEALTH CARE.]		
5a. What services do you feel ________ needs? [BE SPECIFIC]	5. ________ ________ ________ 5[68-69]	5. ________ ________ ________
5b. Why has ________ not received these services? [RECORD ALL THAT APPLY] 1 = lacked money 2 = lacked transportation 3 = did not know how or where to get them 4 = too sick 5 = not sick enough 6 = afraid 7 = other [SPECIFY] 8 = don't know	5b. ________ Specify if "7" ________ ________ ________ 5[70-71]	5b. ________ Specify if "7" ________ ________ ________

[INTERVIEWER: QUESTIONS 6a AND 6b ARE TO BE ASKED ON A HOUSEHOLD BASIS. IF A "YES" RESPONSE IS GIVEN, FOLLOW UP WITH THE OTHER QUESTIONS FOR THE APPROPRIATE INDIVIDUALS.]		
6a. Since January 1, 1972, has anyone in your family used or is anyone currently using either a walker or crutches? ☐1 yes, currently using ☐2 yes, has used previously ☐3 no → [SKIP TO QUESTION 10a] ☐4 don't know → [SKIP TO QUESTION 10a]	5[72]	
6b. Who? 1 - uses/has used 2 - does not use/has not used	6b. ______ 5[73]	6b. ______
7a. How long did (has) ______ have (had) his walker or crutches? [RECORD LENGTH OF TIME]	7a. ______ 5[74-75]	7a. ______
7b. Where did ______ get his walker or crutches? [RECORD NAME AND ADDRESS]	7b. ______ ______ ______ 5[76]	7b. ______ ______ ______
8a. How was (were) ______'s walker or crutches paid for? [MARK ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family → [SKIP TO QUESTION 8c] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid → [ASK: Why not? SPECIFY] 9 - other + - don't know	8a. ______ Specify if "8" ______ ______ ______ 5[77-78]	8a. ______ Specify if "8" ______ ______ ______
8b. Did ______ or his family have to pay anything out-of-pocket for his walker or crutches? 1 - yes 2 - no → [SKIP TO QUESTION 10a] 3 - don't know → [SKIP TO QUESTION 10a]	8b. ______ 6[12]	8b. ______
8c. Approximately how much did ______ or his family have to pay out-of-pocket ? [RECORD EXACT AMOUNT]	8c. ______ 6[13-14]	8c. ______
9a. Would Medicaid have paid for any of this out-of-pocket cost? 1 - yes 2 - no → [SKIP TO QUESTION 10a] 3 - don't know → [SKIP TO QUESTION 10a]	9a. ______ 6[15]	9a. ______
9b. Why did ______ or his family pay for his walker or crutches? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other [SPECIFY] 7 - don't know	9b. ______ Specify if "6" ______ ______ ______ 6[16-17]	9b. ______ Specify if "6" ______ ______ ______

10a. Since January 1, 1972, has anyone in your household ever needed but for some reason not obtained a walker or crutches? ☐1 yes ☐2 no ——>[SKIP TO SECTION J] ☐3 don't know ——>[SKIP TO SECTION J]	6[18]	
10b. Who? 1 = needed 2 = has not needed	10b. ______ 6[19]	10b. ______
11a. When did ______ need it/them? [RECORD MONTH AND YEAR]	11a. mo. ______ year ______ 6[20-23]	11a. mo. ______ year ______
11b. For what difficulty did ______ need it/them?	11b. ______ ______ ______ 6[24-25]	11b. ______ ______ ______
11c. Why didn't ______ obtain a walker or crutches when he needed it/them? [RECORD ALL THAT APPLY] 1 = lacked money 2 = lacked transportation 3 = didn't know how or where to get it/them 4 = too sick 5 = not sick enough 6 = afraid 7 = other [SPECIFY] 8 = don't know	11c. ______ Specify if "7" ______ ______ ______ 6[26-27]	11c. ______ Specify if "7" ______ ______ ______
	6[28-31] always blank	

SECTION J - FAMILY GROWTH AND PLANNING SERVICES

[INTERVIEWER: ASK ONLY ABOUT ELIGIBLE FEMALES BETWEEN 13 AND 50 YEARS OLD. IF THERE ARE NO FEMALES IN THIS AGE GROUP, SKIP TO SECTION K.]

1. Has _________ been pregnant in the last five years, that is, since 1968? 1 - yes, currently 2 - yes, previously ⟶ [SKIP TO QUESTION 3] 3 - no ⟶ [SKIP TO QUESTION 11] 4 - don't know ⟶ [SKIP TO QUESTION 11]	1. _________ 6[32]	1. _________
2a. Is this _________'s first pregnancy? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 3] 3 - don't know ⟶ [SKIP TO QUESTION 3]	2a. _________ 6[33]	2a. _________
2b. Is _________ regularly seeing a doctor during her pregnancy? 1 - yes 2 - no 3 - don't know SKIP TO QUESTION 10	2b. _________ 6[34]	2b. _________
3. How many times has _________ been pregnant during the last five years? [RECORD EXACT NUMBER]	3. _________ 6[35]	3. _________
4a. Did _________'s last pregnancy result in a live birth? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 7] 3 - don't know ⟶ [SKIP TO QUESTION 7]	4a. _________ 6[36]	4a. _________
4b. When was _________'s baby born? 1 - during 1973 2 - during 1972 3 - prior to 1972 ⟶ [SKIP TO QUESTION 10] 4 - don't know ⟶ [SKIP TO QUESTION 10]	4b. _________ 6[37]	4b. _________
4c. Who delivered the baby? 1 - physician 2 - nurse 3 - midwife 4 - policeman 5 - other ⟶ [SPECIFY] 6 - don't know	4c. _________ 6[38]	4c. _________
5a. Did _________ regularly see a doctor during the first three months of this pregnancy? 1 - yes 2 - no 3 - don't know	5. _________ 6[39]	5. _________
5b. Did _________ regularly see a doctor during the last three months of this pregnancy? 1 - yes 2 - no 3 - don't know	5b. _________ 6[40]	5b. _________

6a. Did ________ and her baby see a doctor during the first four months after the baby's birth? 1 - yes 2 - no ——→ [SKIP TO QUESTION 10] 3 - don't know ——→ [SKIP TO QUESTION 10]	6a.________ 6[41]	6a.________
6b. How many times did ________ and her baby see a doctor during these first four months after the baby's birth? [RECORD EXACT NUMBER] SKIP TO QUESTION 10	6b.________ 6[42-43]	6b.________
7. How was ________'s pregnancy terminated? [INTERVIEWER: DO NOT LEAD THE RESPONDENT. THAT IS, DO NOT SAY ANYTHING THAT MIGHT INFLUENCE HER ANSWER.] 1 - miscarriage 2 - stillborn 3 - abortion 4 - other ——→ [SPECIFY] 5 - don't know	7.________ Specify if "4" ________ ________ ________ 6[44]	7.________ Specify if "4" ________ ________ ________
8. During what month was ________'s pregnancy terminated? 1 - 1st through 3rd month [ASK ONLY QUESTION 9a, THEN SKIP TO QUESTION 10] 2 - 4th through 6th month [ASK ONLY QUESTION 9a, THEN SKIP TO QUESTION 10] 3 - 7th through 9th month [ASK BOTH QUESTIONS 9a AND 9b]	8.________ 6[45]	8.________
9a. Did ________ regularly see a doctor during the first three months that she was pregnant? 1 - yes 2 - no 3 - don't know	9a.________ 6[46]	9a.________
9b. Did ________ regularly see a doctor during the last three months that she was pregnant? 1 - yes 2 - no 3 - don't know	9b.________ 6[47]	9b.________
10. Does ________ plan to have more children? 1 - yes 2 - no 3 - don't know	10.________ 6[48]	10.________
11. Has ________ ever received any professional advice on birth control? 1 - yes 2 - no ——→ [SKIP TO QUESTION 17] 3 - don't know ——→ [SKIP TO QUESTION 17]	11.________ 6[49]	11.________
12. Where did ________ get this advice? [RECORD ALL THAT APPLY] 1 - private doctor 2 - hospital outpatient clinic 3 - public parenthood organization 4 - planned parenthood organization 5 - other ——→ [SPECIFY] 6 - don't know	12.________ Specify if "5" ________ ________ ________ 6[50-51]	12.________ Specify if "5" ________ ________ ________

13. Was there a fee or a charge for this advice or for the actual means of birth control? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 17] 3 - don't know ⟶ [SKIP TO QUESTION 17]	13.________ 6[52]	13.________
14. How was this advice or the actual means of birth control paid for? [RECORD ALL THAT APPLY] 1 - Medicaid 2 - other health insurance 3 - self and/or family ⟶ [SKIP TO QUESTION 15b] 4 - relative/friend not in household 5 - Medicare 6 - Veteran's Administration 7 - Workmen's Compensation 8 - not paid ⟶ [ASK: Why not? SPECIFY]	14.________ Specify if "8" ________ ________ ________ 6[53-54]	14.________ Specify if "8" ________ ________ ________
15a. Did ________ or her family have to pay anything out-of-pocket for this actual means of birth control? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 17] 3 - don't know ⟶ [SKIP TO QUESTION 17]	15a.________ 6[55]	15a.________
15b. Approximately how much did ________ or her family have to pay out-of-pocket? [RECORD AMOUNT]	15b.________ 6[55-56]	15b.________
16a. Would Medicaid have paid for any of this out-of-pocket cost? 1 - yes 2 - no ⟶ [SKIP TO QUESTION 17] 3 - don't know ⟶ [SKIP TO QUESTION 17]	16a.________ 6[57]	16a.________
16b. Why did ________ pay for the service? [RECORD ALL THAT APPLY] 1 - lost/did not have Medicaid card 2 - wanted faster service 3 - wanted better service 4 - did not know at time if Medicaid would cover 5 - provider refused to participate in Medicaid 6 - other ⟶ [SPECIFY] 7 - don't know	16b.________ Specify if "6" ________ ________ ________ 6[58-59]	16b.________ Specify if "6" ________ ________ ________
17. Since January 1 of 1972, has ________ wanted to receive medical advice on birth control but has not obtained it? 1 - yes 2 - no ⟶ [SKIP TO SECTION K] 3 - don't know ⟶ [SKIP TO SECTION K]	17.________ 6[60]	17.________
18. Why didn't ________ obtain the advice she wanted? [RECORD ALL THAT APPLY] 1 - lacked money 2 - lacked transportation 3 - did not know where to get it 4 - too sick 5 - not sick enough 6 - afraid 7 - other ⟶ [SPECIFY] 8 - don't know	18.________ Specify if "8" ________ ________ ________ 6[61-62] 6[63-66] always blank	18.________ Specify if "8" ________ ________ ________

SECTION K - GENERAL HEALTH STATUS

1a. Generally speaking, would you rate ________'s health as being: 1 = excellent ⟶ [SKIP TO QUESTION 2a] 2 = good ⟶ [SKIP TO QUESTION 2a] 3 = average ⟶ [SKIP TO QUESTION 2a] 4 = poor ⟶ [ASK QUESTION 1b]	1a. ________ 6[67]	1a. ________
1b. Why do you say ________'s health is poor? [SPECIFY]	1b. ________ ________ ________ 6[68-69]	1b. ________ ________ ________
2a. Would you rate the medical and health care services available to you and your family at this time as being: 1 = excellent ⟶ [SKIP TO QUESTION 3] 2 = good ⟶ [SKIP TO QUESTION 3] 3 = average ⟶ [SKIP TO QUESTION 3] 4 = poor ⟶ [ASK QUESTION 2b]	2a. ________ 6[70]	2a. ________
2b. Why do you say that available health services are poor? [SPECIFY]	2b. ________ ________ ________ 6[71-72]	2b. ________ ________ ________
3. What medical or health care services that you do not have now could you or your family benefit from? [SPECIFY] ________ ________ ________ ________ ________ ☐$_1$ none ☐$_2$ don't know	6[73-74]	

APPENDIX A--PART II

The Arkansas EHSDS Survey

ASSURANCE OF CONFIDENTIALITY – All information which would permit identification of the Individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any purpose.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH SERVICE AND MENTAL HEALTH ADMINISTRATION
NATIONAL CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT

(F6-7)
INTERVIEWERS NUMBER

Address or description of Location

(F1-5) (P1-5)
HOUSEHOLD NUMBER

TELEPHONE NUMBER

HEALTH INTERVIEW SURVEY

RECORD OF CALLS	1	2	3	4	5	6	7	8	(F8)
DATE									(F9-13)
TIME OF CALL	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	(F14-17)

INTERVIEW STATUS:

0 Completed interview

1 Partial interview *(Specify)*

____

____

Interview Mode:
0 Telephone
2 Personal
1 Telephone/Personal
(F20)

Non-interview:

2 Refusal

3 No answer after _____ attempts.

4 Unable to locate address

5 Vacant unit

6 Other *(Specify)* (F19)

____

____

A.T.P. ________________ ________
P.I. Signature Date

____
Interviewer's signature

A.–HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ———— (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME

A.–HOUSEHOLD MEMBERSHIP

1. WHAT IS YOUR NAME? Enter name in First ① Column.
2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD?
3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.
4. For each person ask:
   a. HOW IS________ RELATED TO__________(head of family)? Fill in relationship for each person.
   b. HOW OLD WAS________ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.

RESPONDENT FIRST NAME ①		Q No. A	FIRST NAME ②		FIRST NAME ③	
LAST NAME		1	LAST NAME		LAST NAME	
SEX M F			SEX M F		SEX (P12) M F	
RELATIONSHIP	AGE		RELATIONSHIP	AGE	RELATIONSHIP	AGE
					(P8)	(P9-10

A.–HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ______ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS______ RELATED TO ______ (head of family)? Fill in relationship for each person. b. HOW OLD WAS______ ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.	SEX M F RELATIONSHIP AGE		SEX M F RELATIONSHIP AGE	SEX (P12) M F RELATIONSHIP AGE
B. Ask questions in Section B (skipping as directed) for the respondent, then for person No. 2 and so forth for all family members.		B		
FIRST I WOULD LIKE TO ASK YOU ABOUT YOUR HEALTH AND THE HEALTH OF THOSE IN YOUR FAMILY IN THE LAST TWO WEEKS--THAT IS FROM ______ (date) TO ______ (date) 1. DURING THE LAST TWO WEEKS, DID ______ STAY IN BED ALL OR MOST OF THE DAY BECAUSE OF ANY ILLNESS OR INJURY?	0 NO - go to 3 1 YES 7 NA 8 DK - go to 3	1	0 NO - go to 3 1 YES 7 NA 8 DK - go to 3	0 NO - go to 3 1 YES 7 NA 8 DK - go to 3 (P13)
a. HOW MANY DAYS DID ______ STAY IN BED?	__ DAYS 97 NA 98 DK	1a	__ DAYS 97 NA 98 DK	__ DAYS 97 NA 98 DK (P14-15)
b. WHAT CONDITION CAUSED ______ TO STAY IN BED? (Specify)	______ ______ 7 NA 8 DK	1b	______ ______ 7 NA 8 DK	______ ______ 7 NA 8 DK (P16)
2. APART FROM THE DAYS ______ STAYED IN BED, WERE THERE ANY OTHER DAYS WITHIN THE LAST TWO WEEKS WHEN ______ (WERE/WAS) NOT ABLE TO DO THE THINGS (YOU/HE/SHE) USUALLY (DO/DOES) BECAUSE OF NOT FEELING WELL?	0 NO - go to 4 1 YES 7 NA 8 DK - go to 4	2	0 NO - go to 4 1 YES 7 NA 8 DK - go to 4	0 NO - go to 4 1 YES 7 NA 8 DK - go to 4 (P17)
a. HOW MANY DAYS DID ______ NOT DO THE THINGS (YOU/HE/SHE) USUALLY (DO/DOES) BECAUSE OF NOT FEELING WELL?	__ DAYS 98 DK - go to 4 97 NA	2a	__ DAYS 98 DK - go to 4 97 NA	__ DAYS 98 DK - go to 4 97 NA (P18-19)
b. WHAT WAS THE CONDITION THAT KEPT ______ FROM DOING THE THINGS (YOU/HE/SHE) USUALLY (DO/DOES)? (Specify)	______ ______ go to 4 7 NA 8 DK - go to 4	2b	______ ______ go to 4 7 NA 8 DK - go to 4	______ ______ go to 4 7 NA 8 DK - go to 4 (P20)
3. WITHIN THESE SAME TWO WEEKS, WERE THERE ANY DAYS WHEN ______ (WERE/WAS) NOT ABLE TO DO THE THINGS ______ USUALLY (DO/DOES) BECAUSE OF NOT FEELING WELL?	0 NO - go to 5 1 YES 7 NA 8 DK - go to 5	3	0 NO - go to 5 1 YES 7 NA 8 DK - go to 5	0 NO - go to 5 1 YES 7 NA 8 DK - go to 5 (P21)
a. HOW MANY DAYS DID ______ NOT DO THE THINGS (YOU/HE/SHE) USUALLY (DO/DOES) BECAUSE OF NOT FEELING WELL?	__ DAYS 98 DK 97 NA	3a	__ DAYS 98 DK 97 NA	__ DAYS 98 DK 97 NA (P22-23)
b. WHAT WAS THE CONDITION THAT KEPT ______ FROM DOING THE THINGS THAT (YOU/HE/SHE) USUALLY (DO/DOES)? (Specify)	______ ______ 7 NA 8 DK	3b	______ ______ 7 NA 8 DK	______ ______ 7 NA 8 DK (P24)
4. IS THE PROBLEM WHICH KEPT ______ IN BED (OR CAUSED ______ TO LIMIT ______ ACTIVITIES) RELATED TO A HEALTH PROBLEM ______ (HAVE/HAS) HAD FOR MORE THAN THREE MONTHS?	0 NO - go to 5 1 YES 8 DK - go to 5 7 NA	4	0 NO - go to 5 1 YES 8 DK - go to 5 7 NA	0 NO - go to 5 1 YES 8 DK - go to 5 7 NA (P25)
a. WHAT WAS THE CONDITION THAT ______ (HAVE/HAS) HAD FOR MORE THAN THREE MONTHS? (Specify)	______ (NP) 7 NA 8 DK(NP)	4a	______ (NP) 7 NA 8 DK(NP)	______ (NP) 7 NA 8 DK(NP) (P26)
5. (DO/DOES) ______ HAVE ANY HEALTH PROBLEM OR ILLNESS THAT ______ (HAVE/HAS) HAD FOR MORE THAN THREE MONTHS?	0 NO 7 NA 1 YES 8 DK	5	0 NO 7 NA 1 YES 8 DK	0 NO 7 NA 1 YES 8 DK (P27)
a. WHAT WAS THE CONDITION THAT ______ (HAVE/HAS) HAD FOR MORE THAN THREE MONTHS? (Specify) INTERVIEWER: Have you asked questions 1-5 for all family members? If "NO" ask about next person. If "YES" go on to Section C.	______ ______ 7 NA 8 DK	5a	______ ______ 7 NA 8 DK	______ ______ 7 NA 8 DK (P28)
C. Ask questions in Section C (skipping as directed) for the respondent, then for person No. 2 and so forth for all family members.		C		
1. THINKING BACK OVER THE PAST YEAR, SINCE ______ (date) A YEAR AGO ABOUT HOW MANY DAYS DID ______ STAY IN BED ALL OR MOST OF THE DAY BECAUSE OF ANY ILLNESS OR INJURY?	__ DAYS 998 DK	1	__ DAYS 998 DK	__ DAYS 998 DK (P31-

A.—HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS________ RELATED TO__________(head of family)? Fill in relationship for each person. b. HOW OLD WAS________ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.	SEX M F RELATIONSHIP | AGE		SEX M F RELATIONSHIP | AGE	SEX (P12) M F RELATIONSHIP | AGE
C.—Continued INTERVIEWER: Remember to change Questions 2-4 for children under 16.		C		
2. WITHIN THE LAST 12 MONTHS, ABOUT HOW MANY TIMES DID ________ SEE OR TALK TO A MEDICAL DOCTOR ABOUT (YOUR/HIS/HER) HEALTH? (DO NOT COUNT DOCTORS SEEN WHILE A PATIENT IN A HOSPITAL.)	00 None __ # of Visits 98 DK	2	00 None __ # of Visits 98 DK	00 None __ # of Visits 98 DK (P34-35)
3. WHEN WAS THE LAST TIME ________ SAW OR TALKED TO A MEDICAL DOCTOR ABOUT (YOUR/HIS/HER) HEALTH?	1 Within last 2 wks. 2 2 wks.<3 mos. ago 3 3<6 mos. ago 4 6 mos.<1 yr. ago 5 1 yr.<2 yrs. ago go to 4 __ Years ago 8 DK 0 Never(NP)	3	1 Within last 2 wks. 2 2 wks.<3 mos. ago 3 3<6 mos. ago 4 6 mos.<1 yr. ago 5 1 yr.<2 yrs. ago go to 4 __ Years ago 8 DK 0 Never(NP)	1 Within last 2 wks. 2 2 wks.<3 mos. ago 3 3<6 mos. ago 4 6 mos.<1 yr. ago 5 1 yr.<2 yrs. ago go to 4 __ Years ago 8 DK 0 Never(NP) (P36)
a. HOW MANY TIMES DID ________ SEE OR TALK TO THE DOCTOR IN THE PAST TWO WEEKS?	__ times 97 NA 98 DK	3a	__ times 97 NA 98 DK	__ times 97 NA 98 DK (P37-38)
4. FOR WHAT REASON DID ________ SEE OR TALK TO THE DOCTOR THE LAST TIME?	1 Diag. or Treat.- go to 4b 2 Gen. Check-up 3 Pre. or Postnatal (NP) 4 Eye Exam. (Glasses)(NP) 5 Immunization (NP) 7 NA(NP) 8 DK(NP) 6 Other ________	4	1 Diag. or Treat.- go to 4b 2 Gen. Check-up 3 Pre. or Postnatal (NP) 4 Eye Exam. (Glasses)(NP) 5 Immunization (NP) 7 NA(NP) 8 DK(NP) 6 Other ________	1 Diag. or Treat.- go to 4b 2 Gen. Check-up 3 Pre. or Postnatal (NP) 4 Eye Exam. (Glasses)(NP) 5 Immunization (NP) 7 NA(NP) 8 DK(NP) 6 Other ________ (P39)
a. WAS THIS FOR A SPECIFIC CONDITION?	1 YES 0 NO(NP) 7 NA	4a	1 YES 0 NO(NP) 7 NA	1 YES 0 NO(NP) 7 NA (P40)
b. WHAT IS THE SPECIFIC CONDITION? (Specify)	________ ________ 7 NA	4b	________ ________ 7 NA	________ ________ 7 NA (P41)
D.—Ask this section for the respondent and the entire family. Remember to change questions for children under 16.		D		
1. THINKING BACK OVER THE PAST YEAR, WAS THERE ANY TIME DURING THE PAST 12 MONTHS THAT YOU OR SOMEONE ELSE IN THE FAMILY WANTED TO SEE A DOCTOR BUT FOR SOME REASON DID NOT? 0 NO - go to Sec. E 1 YES 8 DK - go to Sec. E (P42)	▨	1	▨	▨
a. WHO WAS THIS?	1 This person wanted to but did not 7 NA	1a	1 This person wanted to but did not 7 NA	1 This person wanted to but did not 7 NA (P43)
b. WHAT WAS THE MAIN REASON THAT ________ DID NOT SEE A DOCTOR WHEN (YOU/HE/SHE) WANTED TO? 0 did not have enough money to pay a doctor 1 no transportation was available to get to the doctor's office or clinic 2 was too sick to go to the doctor's office or clinic 3 did not want to bother the doctor 4 did not know of a doctor to go to 5 too far to doctor, takes too much time 6 other (Specify) 7 NA 8 DK	0 Money 1 Transportation 2 Too sick 3 Bother doctor 4 Not know doctor 5 Far, time 6 Other ________ 7 NA 8 DK	1b	0 Money 1 Transportation 2 Too sick 3 Bother doctor 4 Not know doctor 5 Far, time 6 Other ________ 7 NA 8 DK	0 Money 1 Transportation 2 Too sick 3 Bother doctor 4 Not know doctor 5 Far, time 6 Other ________ 7 NA 8 DK (P44)
c. WAS THERE ANYONE ELSE IN THE FAMILY WHO WANTED TO SEE A DOCTOR DURING THE PAST 12 MONTHS BUT DIDN'T?	0 NO 1 YES-reask a thru c.	1c	0 NO 1 YES-reask a thru c	0 NO 1 YES-reask a thru c

A.-HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ______ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS______ RELATED TO ______(head of family)? Fill in relationship for each person. b. HOW OLD WAS______ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.	SEX M F RELATIONSHIP AGE		SEX M F RELATIONSHIP AGE	SEX (P12) M F RELATIONSHIP AGE
E. - USUAL SOURCE OF CARE: Ask questions in Section E (skipping as directed) for respondent and then for each family member. Remember to change questions 1 and 1a for children under 16.		E		
1. WHERE (DO/DOES) ______ USUALLY GO WHEN (YOU/HE/SHE) WANT(S) TO SEE A DOCTOR - TO A CLINIC, HOSPITAL, DOCTOR'S OFFICE, OR SOME OTHER PLACE?	0 No usual place (NP) 1 Doctor's office	1	0 No usual place (NP) 1 Doctor's office	0 No usual place (NP) 1 Doctor's office
If clinic, IS IT A HOSPITAL OUTPATIENT CLINIC, A COMPANY CLINIC OR SOME OTHER KIND OF CLINIC?	Clinic 2 Hospital outpatient 4 Company clinic 5 Other clinic		Clinic 2 Hospital outpatient 4 Company clinic 5 Other clinic	Clinic 2 Hospital outpatient 4 Company clinic 5 Other clinic
If hospital, IS IT TO THE HOSPITAL OUTPATIENT CLINIC OR TO THE EMERGENCY ROOM?	Hospital 2 Outpatient clinic 3 Emergency room		Hospital 2 Outpatient clinic 3 Emergency room	Hospital 2 Outpatient clinic 3 Emergency room
If "other place" WHAT TYPE OF PLACE IS IT? (Specify)	______ ______ 8 DK		______ ______ 8 DK	______ ______ 8 DK (P45)
a. IS THERE A PARTICULAR DOCTOR THAT ______ USUALLY SEE(S)?	0 NO 1 YES 7 NA 8 DK	1a	0 NO 1 YES 7 NA 8 DK	0 NO 1 YES 7 NA 8 DK (P46)
2. HOW LONG DOES IT USUALLY TAKE ______TO GET THERE FROM HOME?	__ Minutes (NP) 997 NA(NP) 998 DK(NP)	2	__ Minutes (NP) 997 NA(NP) 998 DK(NP)	__ Minutes (NP) 997 NA(NP) 998 DK(NP) (P47-49)
F. - HEALTH INSURANCE THE NEXT QUESTIONS ARE ABOUT HEALTH INSURANCE.		F		
1. IS ANYONE IN THE FAMILY COVERED UNDER A HEALTH INSURANCE PLAN? WE ARE INTERESTED IN ALL KINDS OF HEALTH INSURANCE PLANS EXCEPT THOSE WHICH PAY ONLY FOR ACCIDENTS. — WHICH MEMBERS OF THE FAMILY ARE COVERED?	1 YES - Health insurance	1	1 YES - Health insurance	1 YES - Health Insurance (P50)
ARE THE MEDICAL EXPENSES OF ANYONE IN THE FAMILY PAID FOR BY THE MEDICARE PLAN? — WHICH MEMBERS OF THE FAMILY ARE COVERED?	1 YES - Medicare		1 YES - Medicare	1 YES - Medicare (P51)
ARE THE MEDICAL EXPENSES OF ANYONE IN THE FAMILY PAID FOR BY MEDICAID OR PUBLIC ASSISTANCE? — WHICH MEMBERS OF THE FAMILY ARE COVERED?	1 YES - Medicaid/public assistance		1 YES - Medicaid/public assistance	1 YES - Medicaid/public assistance (P52)
Interviewer: Ask about those persons for whom no response has been recorded:				
IS ______ COVERED BY ANY OF THE PLANS WE HAVE DISCUSSED?	0 NO 8 DK		0 NO 8 DK	0 NO 8 DK

A. –HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS________ RELATED TO ____________(head of family)? Fill in relationship for each person. b. HOW OLD WAS___ ______ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.	SEX M F RELATIONSHIP AGE		SEX M F RELATIONSHIP AGE	SEX (P12) M F RELATIONSHIP AGE
G. – HOSPITALIZATION		G		
Ask questions in Section G skipping as directed for respondent and then for each family member. 1. (WERE/WAS)____ ______ A PATIENT IN A HOSPITAL AT ANY TIME SINCE ______ A YEAR AGO? (date)	0 NO(NP) 1 YES 8 DK(NP)	1	0 NO(NP) 1 YES 8 DK(NP)	0 NO(NP) 1 YES 8 DK(NP) (P53)
a. HOW MANY TIMES (WERE WAS)________________ IN A HOSPITAL SINCE ____________A YEAR AGO? (date)	________Times 7 NA(NP) 8 DK(NP)	1a	________Times 7 NA(NP) 8 DK(NP)	________Times 7 NA(NP) 8 DK(NP) (P54)
b. THINKING BACK, ABOUT HOW MANY NIGHTS ALTOGETHER DID__________SPEND IN THE HOSPITAL?	________Nights 997 NA 998 DK	1b	________Nights 997 NA 998 DK	________Nights 997 NA 998 DK (P55-57)
c. YOU SAID_____ (WERE/WAS) HOSPITALIZED ______ TIMES IN THE PAST YEAR. THE LAST TIME, WHAT WAS THE REASON FOR HOSPITALIZATION? (Specify)	________ ________ 7 NA	1c	________ ________ 7 NA	________ ________ 7 NA (P58)
d. THE TIME BEFORE? (Specify)	________ ________ 7 NA	1d	________ ________ 7 NA	________ ________ 7 NA
e. THE TIME BEFORE THAT? (Specify)	________ ________ 7 NA	1e	________ ________ 7 NA	________ ________ 7 NA

H. – EMERGENCY MEDICAL Ask this section of the respondent for the family. 1. HAS YOUR FAMILY, AS A GROUP, EVER DISCUSSED WHAT TO DO IF A FAMILY MEMBER HAS A MEDICAL EMERGENCY AT HOME? (Skip if respondent is single or is living alone).	0 NO 1 YES 7 NA 8 DK (F23)
2. DO YOU HAVE INFORMATION ON WHOM IN YOUR COMMUNITY TO CONTACT IF YOU HAVE A MEDICAL EMERGENCY?	0 NO – GO TO 3 1 YES 8 DK – TO TO 3 (F24)
a. FROM WHERE OR HOW DID YOU OBTAIN THE INFORMATION?	00 RADIO 01 TELEVISION 02 NEWSPAPER 03 LEAFLET 04 TELEPHONE STICK-ON 05 PERSONAL LETTER 06 WORD OF MOUTH 07 POLICE 08 FIRE DEPARTMENT 09 SCHOOL 10 OTHER ______________ (Specify) 11 DOCTOR 12 TELEPHONE BOOK 97 NA 98 DK (F25-26)

A.–HOUSEHOLD MEMBERSHIP

1. WHAT IS YOUR NAME? Enter name in First ① Column.
2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD?
3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questiannaire and renumber columns as needed. Indicate Head.

4. For each persan ask:
   a. HOW IS ________ RELATED TO ____________ (head of family)? Fill in relationship for each persan.
   b. HOW OLD WAS ________ ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.

RESPONDENT FIRST NAME ①		Q No. A	FIRST NAME ②		FIRST NAME ③	
LAST NAME		1	LAST NAME		LAST NAME	
SEX M F			SEX M F		SEX (P12) M F	
RELATIONSHIP	AGE		RELATIONSHIP	AGE	RELATIONSHIP	A

H. - Continued

3. IF SOMEONE HAD A HEART ATTACK IN YOUR HOUSE RIGHT NOW, WHAT WOULD YOU DO? (If respondent gives more than one response, have him/her list in order of first and second action taken.)	FIRST ACTION 00 GIVE FIRST AID 01 TRANSPORT PERSON TO SOME PLACE 02 CALL FOR HELP IN GENERAL 03 CALL POLICE DEPARTMENT 04 CALL FIRE DEPARTMENT 05 CALL AMBULANCE 06 CALL HOSPITAL/DOCTOR/CLINIC 07 CALL TELEPHONE OPERATOR 08 CALL FRIEND/NEIGHBOR/RELATIVE 09 OTHER ________ (Specify) 98 DK (F27-28)	SECOND ACTION 00 GIVE FIRST AID 01 TRANSPORT PERSON TO SOME PLACE 02 CALL FOR HELP IN GENERAL 03 CALL POLICE DEPARTMENT 04 CALL FIRE DEPARTMENT 05 CALL AMBULANCE 06 CALL HOSPITAL/DOCTOR/CLINIC 07 CALL TELEPHONE OPERATOR 08 CALL FRIEND/NEIGHBOR/RELATIVE 09 OTHER ________ (Specify) 98 DK (F29-30)
4. HAS ANYONE IN THE FAMILY HAD A FIRST AID COURSE OR A MEDICAL SELF-HELP COURSE?	0 NO – GO TO 5 1 YES 8 DK – GO TO 5 (F31)	
a. HOW LONG AGO WAS THAT? (If respondent states that family members have had more than one course, question refers to most recent one.)	0 WITHIN 1 YEAR ___# OF YEARS (1-5) 6 OVER 5 YEARS 7 NA 8 DK (F32	
5. IS YOUR COMMUNITY SERVED BY AN AMBULANCE SERVICE?	0 NO – GO TO 6 1 YES 8 DK – GO TO 6 (F3	
a. WHAT IS ITS NAME?	Name ____________ 7 NA 8 DK (F3	
6. WHERE WOULD YOU GO TO RECEIVE EMERGENCY MEDICAL CARE?	0 HOSPITAL 1 DOCTOR'S OFFICE 2 CLINIC 3 OTHER ________ (Specify) 8 DK – GO TO I (F35)	

A.–HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS________ RELATED TO____________(head of family)? Fill in relationship for each person. b. HOW OLD WAS________ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age.	SEX M F RELATIONSHIP AGE		SEX M F RELATIONSHIP AGE	SEX (P12) M F RELATIONSHIP AGE

H.- Continued

a. HOW LONG DO YOU THINK IT WOULD TAKE YOU TO GET THERE UNDER NORMAL TRAFFIC AND WEATHER CONDITIONS?	0 UNDER 5 MINUTES 1 5 - 10 MINUTES 2 11 - 20 MINUTES 3 21 - 30 MINUTES 4 OVER 30 MINUTES 7 NA 8 DK (F36)

I. – MEDICAL CARE

Ask this question of the respondent for the family. 1. FOR A MINOR ILLNESS OR A ROUTINE CHECKUP WOULD YOU BE WILLING TO USE A QUALIFIED HEALTH PROFESSIONAL OTHER THAN A MEDICAL DOCTOR (FOR EXAMPLE, MEDIC, PHYSICIAN ASSISTANT, NURSE PRACTITIONER)?	0 NO 1 YES 2 YES, UNDER A DOCTOR'S SUPERVISION 3 YES, UPON ADVICE OF DOCTOR 8 DK (F37)

J. – DENTAL

Ask questions in Section J (skipping as directed) for respondent and then for each family member.		J		
1. WITHIN THE LAST 12 MONTHS, ABOUT HOW MANY TIMES DID ____________ VISIT A DENTIST	0 NONE _____# OF VISITS (1-5) 6 OVER 5 VISITS 8 DK	1	0 NONE _____# OF VISITS (1-5) 6 OVER 5 VISITS 8 DK	0 NONE _____# OF VISITS (1-5) 6 OVER 5 VISITS 8 DK (P59)
2. THINKING BACK OVER THE PAST YEAR, WAS THERE ANY TIME THAT ____________ NEEDED TO VISIT A DENTIST BUT FOR SOME REASON DID NOT?	0 NO (NP) 1 YES 8 DK (NP)	2	0 NO (NP) 1 YES 8 DK (NP)	0 NO (NP) 1 YES 8 DK (NP) (P60)
a. WHAT WAS THE MAIN REASON THAT ____________DID NOT VISIT A DENTIST WHEN (YOU/HE/SHE) WANTED TO? 0 DID NOT HAVE ENOUGH MONEY 1 NO TRANSPORTATION WAS AVAILABLE 2 WAS TOO SICK TO GO 3 DID NOT WANT TO BOTHER THE DENTIST 4 DID NOT KNOW A DENTIST TO GO TO 5 TOO FAR TO DENTIST, TAKES TOO MUCH TIME 6 OTHER (SPECIFY) 7 NOT APPROPRIATE 8 DON'T KNOW	0 MONEY 1 TRANSPORTATION 2 SICK 3 NOT BOTHER 4 DID NOT KNOW DENTIST 5 TOO FAR 6 OTHER ________ (Specify) 7 NA 8 DK	2a	0 MONEY 1 TRANSPORTATION 2 SICK 3 NOT BOTHER 4 DID NOT KNOW DENTIST 5 TOO FAR 6 OTHER ________ (Specify) 7 NA 8 DK	0 MONEY 1 TRANSPORTATION 2 SICK 3 NOT BOTHER 4 DID NOT KNOW DENTIST 5 TOO FAR 6 OTHER ________ (Specify) 7 NA 8 DK (P61)

A.–HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ________ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	Q No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS ______ RELATED TO ____________ (head of family)? Fill in relationship for each person. b. HOW OLD WAS ________ ON (HIS/HER) LAST BIRTHDAY? Circle sex	SEX M F RELATIONSHIP AGE		SEX M F RELATIONSHIP AGE	SEX (P12) M F RELATIONSHIP
H.- Continued				
K. – PAP SMEAR TEST Ask questions in this section only of females 15 years or older. 1. HAVE/HAS ____________ EVER HAD A PAP SMEAR TEST?	0 NO – (NP) 1 YES 7 NA 8 DK-(NP)	K	0 NO – (NP) 1 YES 7 NA 8 DK-(NP)	0 NO – (NP) 1 YES 7 NA 8 DK-(NP)
a. HOW OFTEN DO/DOES ________ HAVE THIS TEST?	1 ONCE A YEAR OR MORE OFTEN 2 LESS OFTEN 7 NA 8 DK	a	1 ONCE A YEAR OR MORE OFTEN 2 LESS OFTEN 7 NA 8 DK	1 ONCE A YEAR OR MORE OFTEN 2 LESS OFTEN 7 NA 8 DK
L. – PRESCRIPTIONS Ask questions in Section L (skipping as directed) for respondent and then for each family member. 1. IN THE PAST 3 MONTHS, DID ________ RECEIVE ANY NEW PRESCRIPTIONS FOR MEDICINE FROM A PHYSICIAN?	0 NO – GO TO b 1 YES 8 DK – GO TO b	L	0 NO – GO TO b 1 YES 8 DK – GO TO b	0 NO – GO TO b 1 YES 8 DK – GO TO b
a. ABOUT HOW MANY PRESCRIPTIONS?	____NUMBER 97 NA 98 DK	a	____NUMBER 97 NA 98 DK	____NUMBER 97 NA 98 DK
b. IN THE PAST 3 MONTHS HOW MANY TIMES DID __________ FAIL TO HAVE A PRESCRIPTION FILLED OR REFILLED WHEN NEEDED?	00 NONE – (NP) ____NUMBER 98 DK-(NP)	b	00 NONE – (NP) ____NUMBER 98 DK-(NP)	00 NONE – (NP) ____NUMBER 98 DK-(NP)
c. WHY DID (THIS/THESE) PRESCRIPTION(S) NOT GET FILLED OR REFILLED WHEN NEEDED? 0 TAKES TOO LONG 1 LACKED THE MONEY 2 LACKED TRANSPORTATION 3 DID NOT KNOW WHERE TO GET IT FILLED 4 TOO SICK 5 OTHER (SPECIFY) 7 NOT APPROPRIATE 8 DON'T KNOW	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE 4 SICK 5 OTHER ________ (Specify) 7 NA 8 DK	c	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE 4 SICK 5 OTHER ________ (Specify) 7 NA 8 DK	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE 4 SICK 5 OTHER ________ (Specify) 7 NA 8 DK

A.-HOUSEHOLD MEMBERSHIP 1. WHAT IS YOUR NAME? Enter name in First ① Column. 2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD? 3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ______ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.	RESPONDENT FIRST NAME ① LAST NAME	0 No. A 1	FIRST NAME ② LAST NAME	FIRST NAME ③ LAST NAME
4. For each person ask: a. HOW IS______ RELATED TO ______(head of family)? Fill in relationship for each person. b. HOW OLD WAS______ON (HIS/HER) LAST BIRTHDAY? Circle sex and enter age	SEX M F RELATIONSHIP | AGE		SEX M F RELATIONSHIP | AGE	SEX (P12) M F RELATIONSHIP | AGE
H.- Continued				
M. – EYE CARE Ask questions in Section M (skipping as directed) for respondent and then for each family member.		M		
1. IN THE PAST 12 MONTHS, DID ______ VISIT AN EYE DOCTOR?	0 NO – (NP) 1 YES 8 DK – (NP)	1	0 NO – (NP) 1 YES 8 DK – (NP)	0 NO – (NP) 1 YES 8 DK – (NP) (P70)
a. ABOUT HOW MANY TIMES?	__# OF VISITS (1-5) 6 OVER 5 VISITS 7 NA 8 DK	1a	__# OF VISITS (1-5) 6 OVER 5 VISITS 7 NA 8 DK	__# OF VISITS (1-5) 6 OVER 5 VISITS 7 NA 8 DK (P71)
b. DID THE DOCTOR EITHER PRESCRIBE GLASSES OR CHANGE (YOUR, HIS, HER) PRESCRIPTION?	0 NO – (NP) 1 YES 7 NA 8 DK – (NP)	1b	0 NO – (NP) 1 YES 7 NA 8 DK – (NP)	0 NO – (NP) 1 YES 7 NA 8 DK – (NP) (P72)
c. DID ______ OBTAIN THE PRESCRIBED GLASSES?	0 NO 1 YES – (NP) 7 NA 8 DK – (NP)	1c	0 NO 1 YES – (NP) 7 NA 8 DK – (NP)	0 NO 1 YES – (NP) 7 NA 8 DK – (NP) (P73)
d. WHY NOT? 0 TAKES TOO LONG 1 LACKED THE MONEY 2 LACKED TRANSPORTATION 3 DID NOT KNOW WHERE TO OBTAIN THEM 4 OTHER (SPECIFY) 7 NOT APPROPRIATE 8 DON'T KNOW	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE TO OBTAIN THEM 4 OTHER ______ (Specify) 7 NA 8 DK	1d	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE TO OBTAIN THEM 4 OTHER ______ (Specify) 7 NA 8 DK	0 TOO LONG 1 MONEY 2 TRANSPORTATION 3 DID NOT KNOW WHERE TO OBTAIN THEM 4 OTHER ______ (Specify) 7 NA 8 DK (P74)
N. EDUCATION, EMPLOYMENT STATUS, RESIDENCE, RACE, INCOME Ask questions 1 and 2 as a block for each family member age 17 years or over. 1. WHAT IS THE HIGHEST GRADE OR YEAR ______ COMPLETED IN SCHOOL? Circle the number corresponding to the highest grade reported for each person.	00 None Elem: 1 2 3 4 5 6 7 8 High: 9 10 11 12 College. 1 2 3 4 5+ 97 NA - Under age 17 98 DK	N 1	00 None Elem: 1 2 3 4 5 6 7 8 High: 9 10 11 12 College 1 2 3 4 5+ 97 NA - Under age 17 98 DK	00 None Elem: 1 2 3 4 5 6 7 8 High: 9 10 11 12 College: 1 2 3 4 5+ 97 NA - Under age 17 98 DK (P75-76)
2. DID ______ WORK AT ANY TIME LAST WEEK OR THE WEEK BEFORE – (for females): NOT COUNTING WORK AROUND THE HOUSE?	0 NO 1 YES(NP) 7 NA 8 DK(NP)	2	0 NO 1 YES(NP) 7 NA 8 DK(NP)	0 NO 1 YES(NP) 7 NA 8 DK(NP) (P77)
a. EVEN THOUGH ______ DID NOT WORK DURING THESE 2 WEEKS, DID ______ HAVE A JOB OR BUSINESS?	0 NO (NP) 1 YES(NP) 7 NA(NP) 8 DK(NP)	2a	0 NO(NP) 1 YES(NP) 7 NA(NP) 8 DK(NP)	0 NO(NP) 1 YES(NP) 7 NA(NP) 8 DK(NP) (P78)

HSM-671 (PAGE 20)
7-72

A.-HOUSEHOLD MEMBERSHIP

1. WHAT IS YOUR NAME? Enter name in First ① Column.
2. WHAT IS THE NAME OF THE HEAD OF YOUR FAMILY LIVING IN THIS HOUSEHOLD?
3. WHAT ARE THE NAMES OF ALL PERSONS LIVING HERE NOW WHO ARE RELATED TO ______ (head)? Enter first and last names in subsequent columns. If more than 9 in family, prepare 2nd questionnaire and renumber columns as needed. Indicate Head.

4. For each person ask:
   a. HOW IS______ RELATED TO__________(head of family)? Fill in relationship for each person.
   b. HOW OLD WAS______ON (HIS/HER) LAST BIRTHDAY? Circle sex

RESPONDENT FIRST NAME ①	Q No. A	FIRST NAME ②		FIRST NAME ③
LAST NAME	1	LAST NAME		LAST NAME
SEX M F		SEX M F		SEX (P12) M F
RELATIONSHIP	AGE	RELATIONSHIP	AGE	RELATIONSHIP

H.- Continued

N. — Continued

3. I WOULD LIKE TO GET THE COMPLETE MAILING ADDRESS FOR YOUR HOME. Be certain to get a complete address. ______________________

If you are speaking with the head of the family ask this question:

4. WHAT RACE ARE YOU — BLACK OR WHITE?

0 Black - go to S
1 White - go to S
2 Other ______________ - go to S
9 Refusal - go to S
7 NA

If you are speaking with someone other than the head of the family, ask this question:

a. WHAT RACE IS THE HEAD OF THE FAMILY — BLACK OR WHITE?

0 Black
1 White
2 Other ______________
9 Refusal
7 NA

5. NOW I WOULD LIKE YOU TO ESTIMATE THE TOTAL COMBINED INCOME OF YOUR FAMILY FOR THE PAST 12 MONTHS - THAT IS, YOURS, YOUR ______________'s, ETC. PLEASE INCLUDE INCOME FROM ALL SOURCES - THAT IS, WAGES, SALARIES, SOCIAL SECURITY OR RETIREMENT BENEFITS, HELP FROM RELATIVES, RENT FROM PROPERTY AND SO FORTH.

$ ______________ year ☐ per month ☐ week ☐
99998 DK
99999 Refusal

O. — OTHER FAMILIES

1. ARE THERE ANY OTHER PERSONS OR FAMILIES UNRELATED TO YOU THAT RESIDE IN THIS HOUSEHOLD? ☐ YES ☐ NO

INTERVIEWER: If the respondent answers "yes" to the above question, thank this respondent for cooperating and ask to speak to someone who knows the most about the health and medical care of (those/that person(s)/ family(ies). When the next respondent comes, start a new questionnaire by beginning with the introduction and then question 1.

Telephone: Thank the respondent for cooperating and hang up. Then look thru the questionnaire to be sure you asked all questions that were required and that all questions have one box marked.

Personal: Take a moment to look through the questionnaire to be sure you asked all questions that were required and that all questions have one box marked. Then thank the respondent for cooperating.

Don't forget to enter the ending time of the interview ______________ AM PM

Before returning the questionnaire to the supervisor, be sure to enter your name and mark the Interview Status box on the cover page of the questionnaire.

APPENDIX A--PART III

County Welfare Administrators' Survey

Dear Sir:

On July 1, 1972, Temple University's School of Business, Department of Health Administration received a $300,000 contract from the U. S. Department of Health, Education and Welfare - Social and Rehabilitation Service to study the impact of the exclusion of certain optional services from a state's Medicaid benefits package on the ability of the Medicaid eligibles to obtain those services. The optional services upon which we are focusing our attention are: prescribed medicines or drugs (prescriptions), eye care (routine optometric services and eyeglasses), and dental care (restorative work, extractions, checkups, X-rays, orthodontia, and dentures.)

In order to obtain the desired information, we have undertaken two surveys: (1) a field survey of 1000 Medicaid cases in each of four cities--Little Rock, Arkansas; Oklahoma City, Oklahoma; Atlanta, Georgia; and, as a comparison site where practically all of the optional services are covered, Trenton, New Jersey. Through this survey, we are attempting to determine which services the eligibles are using and with what frequency, where they are obtaining them, and how they are being paid for. We are also attempting to determine to what extent they have needed certain services but not obtained them, and why not.

(2) This mail survey of county welfare administrators in those 20-25 states where one or more of the above-listed optional services are not covered by Medicaid. While our field survey will give us some very hard data directly from the eligibles themselves, it will, of course, do so only with respect to three local sites, (Trenton, New Jersey is a control site). Needless to say, we are very much interested in being able to give DHEW-SRS some pertinent information with respect to other areas within these 20-25 states.

Through this survey we hope to ascertain the extent to which local governments and/or voluntary agencies have established programs to supplement Medicaid, to help the eligibles obtain services not paid for by Medicaid. For example, in many communities, the local Lions Club has an eye program which, to the extent funds permit, provides glasses free of charge to the indigent. In Oklahoma, where prescription drugs are not covered by Medicaid, Tulsa and Oklahoma counties have set up county dispensaries to assist welfare clients in filling their prescriptions. We also hope to find out how effective such supplemental programs are in assisting the eligibles to meet their health care needs, i.e., to what extent does the lack of Medicaid coverage for a particular service prevent or deter the eligibles from obtaining the services when they are needed.

Your cooperation, then, in answering the enclosed questionnaire will be very much appreciated and should provide us with a great deal of significant information relevant to the formulation of national health care policy. If, in your opinion, there are some other individuals on your staff (e.g., a caseworker or an administrative assistant) who is more familiar with the health care needs of the eligibles, we would appreciate it if you would seek their assistance in completing the questionnaire. This information will be used for official purposes only. A stamped envelope has been provided for your convenience.

Again, thank you very much for your cooperation.

Sincerely,

William F. McKenna
Project Manager

COUNTY WELFARE ADMINISTRATORS' QUESTIONNAIRE

QUESTION I

INSTRUCTIONS: ACCORDING TO THE U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE-SOCIAL AND REHABILITATION SERVICE, THE FOLLOWING OPTIONAL SERVICES ARE NOT COVERED UNDER OKLAHOMA 'S MEDICAID PROGRAM:

- Dentures, Optometric Services, Eyeglasses and Prescriptions

AS YOU CAN SEE, THERE IS A SEPARATE SECTION FOR EACH OF THESE UNCOVERED OPTIONAL SERVICES. IN EACH SECTION (i.e., FOR EACH SERVICE), PLEASE LIST IN THE SPACE PROVIDED ANY AND ALL PROGRAMS OPERATING IN YOUR COUNTY WHICH PROVIDE THAT PARTICULAR SERVICE TO THE MEDICAID ELIGIBLES AT LITTLE OR NO COST. SUCH PROGRAMS MIGHT BE SPONSORED BY ANY ONE OF SEVERAL SOURCES: A.) THE FEDERAL GOVERNMENT (e.g., O.E.O. OR MODEL CITIES NEIGHBORHOOD HEALTH CENTERS); B.) THE STATE GOVERNMENTS; C.) THE LOCAL OR COUNTY GOVERNMENT (e.g., PUBLIC SCHOOL DENTAL PROGRAMS); D.) A PRIVATE OR VOLUNTARY AGENCY (e.g., RELIGIOUS INSTITUTIONS AND SUCH SERVICE ORGANIZATIONS AS THE LIONS CLUB, ETC.); OR, E.) BY ANY OTHER AGENCY OR INDIVIDUAL. WE WOULD ASK YOU TO INDICATE THE SPONSOR OF EACH PROGRAM LISTED BY USING THE FOLLOWING CODE:

F = FEDERAL GOVERNMENT, S = THE STATE GOVERNMENT,
C = COUNTY OR LOCAL GOVERNMENT, P = PRIVATE AGENCY
O = OTHER (IN WHICH CASE, PLEASE SPECIFY.)

SIMPLY WRITE THE APPROPRIATE CODE LETTER AFTER THE NAME OF ANY PROGRAM YOU LIST.

IN THIS QUESTION, WE ARE NOT INTERESTED IN THE MAGNITUDE OR THE ADEQUACY OF SUCH PROGRAMS; WE SIMPLY WANT TO KNOW OF THEIR EXISTENCE. IF, TO YOUR KNOWLEDGE, THERE ARE NO SUCH PROGRAMS, PLEASE WRITE IN "NONE."

SUPPLEMENTAL PROGRAMS

Dental Service - Dentures

	Name of Program	Sponsor
1)		
2)		
3)		
4)		
5)		
6)		
7)		

EYE CARE (OPTOMETRIC SERVICES-EXAMINATIONS AND REFRACTIONS-AND EYEGLASSES)

UNDER COVERAGE, PLEASE TELL US WHETHER EACH PROGRAM YOU LIST COVERS EXAMINATIONS ONLY (IN WHICH CASE, WRITE AN "E"), GLASSES ONLY (WRITE "G"), OR BOTH (WRITE A "B".)

	Name of Program	Coverage	Sponsor
1)			
2)			
3)			
4)			
5)			
6)			
7)			

PRESCRIPTION MEDICINE

	Name of Program	Sponsor
1)		
2)		
3)		

QUESTION II

INSTRUCTIONS: FOR EACH OPTIONAL SERVICE LISTED BELOW, PLEASE CHECK THE ANSWER THAT BEST DESCRIBES THE EXTENT TO WHICH THAT PARTICULAR SERVICE, FOR WHATEVER REASON(S), IS INACCESSIBLE TO THE ADULT ELIGIBLES (OVER AGE 18) IN YOUR COUNTY. FOR THOSE OPTIONAL SERVICES WHERE YOU ANSWER EITHER ITEM "3" OR "4", PLEASE ALSO ANSWER THE FOLLOW-UP QUESTION RELATING TO THE REASONS FOR SUCH INACCESSIBILITY.

DENTURES

1.____Very Accessible	Virtually all of the adult eligibles are able to obtain dentures when they want them.
2.____Fairly Accessible	Most of the adult eligibles are able to obtain dentures when they want them.
3.____Somewhat Inaccessible	Many of the adult eligibles--for whatever reason--are unable to obtain dentures when they want them.
4.____Very Inaccessible	Most adult eligibles--for whatever reason--are unable to obtain dentures when they want them.

IF YOU ANSWERED EITHER "3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

____1. Lack of Medicaid Coverage of Dentures ____2. Few, if any, dentists available

____3. Lack of Transportation to Available Dentists ____4. Other (Specify)

OPTOMETRIC SERVICES-(Eye Examinations and Refractions-Not Eyeglasses)

1. ___Very Accessible -	Virtually all of the adult eligibles are able to obtain optometric services when they want them.
2. ___Fairly Accessible--	Most of the adult eligibles are able to obtain optometric services when they want them.
3. ___Somewhat Inaccessible--	Many of the adult eligibles--for whatever reason--are unable to obtain dentures when they want them
4.___Very Inaccessible--	Most adult eligibles--for whatever reason--are unable to obtain dentures when they want them.

IF YOU ANSWERED EITHER"3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

___1. Lack of Medicaid Coverage of optometric services

___2. Few, if any, providers available

___3. Lack of Transportation to available providers.

___4. Other (Specify)

EYEGLASSES

1.___Very Accessible	Virtually all of the adult eligibles are able to obtain eyeglasses when they want them.
2.___Fairly Accessible	Most of the adult eligibles are able to obtain eyeglasses when they want them.
3.___Somewhat Inaccessible	Many of the adult eligibles--for whatever reason--are unable to obtain eyeglasses when they want them.
4.___Very Inaccessible	Most adult eligibles--for whatever reason--are unable to obtain eyeglasses when they want them.

IF YOU ANSWERED EITHER "3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

___1. Lack of Medicaid Coverage of Eyeglasses

___2. Few,if any, providers available

___3. Lack of Transportation to Available Providers

___4. Other (Specify)

PRESCRIPTIONS

1. ____Very Accessible - The lack of Medicaid coverage for prescriptions has not inhibited physicians from issuing them, and virtually all of the adult eligibles are able to fill most of their prescriptions.

2. ____Fairly Accessible - The lack of Medicaid coverage for prescriptions has not inhibited physicians from issuing them, and most of the adult eligibles are able to fill most of their prescriptions.

3. ____Somewhat Inaccessible - Either physicians have been somewhat inhibited from issuing prescriptions or many of the adult eligibles are unable to fill the prescriptions that have been issued.

4. ____Very Inaccessible - Either physicians have been largely inhibited from issuing prescriptions or most of the adult eligibles are unable to fill the prescriptions that have been issued.

IF YOU HAVE ANSWERED EITHER "3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

____1. Lack of Medicaid Coverage of prescriptions
____2. Few, if any, providers available
____3. Lack of Transportation to available providers
____4. Other (Specify)

QUESTION III

INSTRUCTIONS: FOR EACH OPTIONAL SERVICE LISTED BELOW, PLEASE CHECK THE ANSWER THAT BEST DESCRIBES THE EXTENT TO WHICH THAT PARTICULAR SERVICE, FOR WHATEVER REASON(S), IS INACCESSIBLE TO THE ELIGIBLES UNDER AGE 18 IN YOUR COUNTY. FOR THOSE OPTIONAL SERVICES WHERE YOU ANSWER EITHER ITEM "3" OR "4", PLEASE ALSO ANSWER THE FOLLOWUP QUESTION RELATING TO THE REASONS FOR SUCH INACCESSIBILITY.

OPTOMETRIC CARE (Eye examinations and refractions - Not eyeglasses.)

1. ____Very Accessible - Virtually all of the eligibles under age 18 are able to obtain routine optometric care when they want it.

2. ____Fairly Accessible - Most of the eligibles under age 18 are able to obtain routine optometric care when they want it.

3. ____Somewhat Inaccessible - Many of the eligibles under age 18--for whatever reason--are unable to obtain routine optometric care when they want it.

4. ____Very Inaccessible - Most eligibles under age 18--for whatever reason--are unable to obtain routine optometric care when they want it.

IF YOU ANSWERED EITHER "3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

___1. Lack of Medicaid coverage of optometric services

___2. Few, if any optometrists, available

___3. Lack of transportation to available optometrists

___4. Other (Specify)

EYEGLASSES

1.___Very Accessible - Virtually all of the eligibles under age 18 are able to obtain eyeglasses when they want them.

2.___Fairly Accessible - Most of the eligibles under age 18 are able to obtain eyeglasses when they want them.

3.___Somewhat Accessible - Many of the eligibles under age 18--for whatever reason--are unable to obtain eyeglasses when they want them.

4.___Very Inaccessible - Most of the eligibles under age 18--for whatever reason--are unable to obtain eyeglasses when they want them.

PRESCRIPTIONS

1.___Very Accessible - The lack of Medicaid coverage for prescriptions has not inhibited physicians from issuing them and virtually all of the eligibles under age 18 are able to fill most of their prescriptions.

2.___Fairly Accessible - The lack of Medicaid coverage for prescriptions has not inhibited physicians from issuing them and most of the eligibles under age 18 are able to fill most of their prescriptions.

3.___Somewhat Inaccessible - Either physicians have been somewhat inhibited from issuing prescriptions or many of the eligibles under age 18 are unable to fill the prescriptions that have been issued.

4.___Very Inaccessible - Either physicians have been largely inhibited from issuing prescriptions or most of the eligibles under age 18 are unable to fill the prescriptions that have been issued.

IF YOU ANSWERED EITHER "3" OR "4" ABOVE, CHECK FROM THE FOLLOWING ITEMS THE REASONS FOR SUCH INACCESSIBILITY; CHECK ALL THAT APPLY.

___1. Lack of Medicaid Coverage of Prescriptions

___2. Few, if any, providers available

___3. Lack of Transportation to Available Providers

___4. Other (Specify)

QUESTION IV

PLEASE RANK THE FOLLOWING SERVICES ACCORDING TO THE RELATIVE IMPORTANCE THAT YOU ATTACH TO THEIR ADDITION TO THE STATE'S MEDICAID BENEFITS PACKAGE:

Dentures	Eyeglasses
Optometric Services	Prescriptions

1. First Priority____

2. Second Priority___

3. Third Priority___

4. Fourth Priority___

PLEASE STATE THE POSITION OF THE INDIVIDUAL WHO COMPLETED THIS INSTRUMENT. WE ARE NOT INTERESTED IN CHECKING ON ANYONE; MERELY, IN KNOWING THE TYPES OF INDIVIDUALS (ADMINISTRATORS, CASEWORKERS, ETC.) WHO ARE ANSWERING THESE QUESTIONS.

Thank you.

Position: ______________________________

APPENDIX A--PART IV

Oklahoma Physician Survey

THE OKLAHOMA STATE MEDICAL ASSOCIATION · OKLAHOMA CITY, OKLAHOM
601 NORTHWEST EXPRESSWAY, OKLAHOMA CITY, OKLAHOMA 73118 • AREA CODE 405 842-3361

Dear Doctor:

You have been selected among a sampling of Oklahoma physicians to respond to the enclosed brief questionnaire concerning the problem of obtaining medications for indigent Medicaid patients.

The results of this survey could influence national health policy, and I think it would be perfectly all right for us to answer the survey objectively and expeditiously.

You need not sign the survey form and no effort will be made to isolate individual responses.

Sincerely,

C. Riley Strong

C. Riley Strong, M.D.
President

CRS:bjm
Enclosure

PRESIDENT/C. RILEY STRONG, M.D. • PRESIDENT-ELECT JACK L. RICHARDSON, M.D. • VICE-PRESIDENT/ARNOLD G. NELSON, M
SECRETARY TREASURER/HAVEN W. MANKIN, M.D. • SPEAKER HOUSE OF DELEGATES ROGER J. REID, M.D. • VICE-SPEAKER/S. N. STONE, M.O
CHAIRMAN, BOARD OF TRUSTEES/M. JOE CROSTHWAIT, M.D. • EXECUTIVE DIRECTOR DON BLAIR • ASSOCIATE EXECUTIVE DIRECTORS/ED KELSAY AND DAVID BICKHAM

1900

OKLAHOMA OSTEOPATHIC ASSOCIATION

1310 CITIZENS TOWER BUILDING • 2200 CLASSEN BLVD.
OKLAHOMA CITY, OKLAHOMA 73106 • TELEPHONE 405/528-7095

BOB E. JONES
Executive Director

October 23, 1973

Dear Doctor:

I recommend that you complete and return the enclosed Temple University questionnaire. It should provide a significant amount of information relevant to the formulation of national health care policy for the indigent. The association is also interested in finding out how physicians in Oklahoma are reacting to the lack of Medicaid coverage for prescriptions.

Needless to say, a valid survey is dependent upon a high rate of response. Therefore, I would appreciate it if you would complete and return the enclosed questionnaire as soon as possible. Let me thank you in advance for your cooperation.

Sincerely yours,

J Scott Hickerson, D.O.

J. SCOTT HICKERSON, D.O.
President, Oklahoma Osteopathic Association

BEJ:slh

Encl.

TEMPLE UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION
PHILADELPHIA, PENNSYLVANIA 19122

DEPARTMENT OF
HEALTH ADMINISTRATION

November 12, 1973

Dear Doctor:

Temple University in Philadelphia has a contract with HEW-Social and Rehabilitation Service to study the effect of the state's exclusion of certain optional services from its Medicaid benefits package on the ability of the Medicaid patients to obtain those excluded services.

We are focusing upon the following optional services: prescribed medications, eye care (routine optometric services and eyeglasses) and dental care (restorative work, extractions, check-ups, orthodontic and dentures).

The Medicaid program in Oklahoma does not cover prescriptions. If Medicaid patients are unable to fill prescriptions, we want to determine how physicians and their Medicaid patients deal with this problem. It is important to know, for example, whether physicians are deterred from issuing prescriptions if they realize they will not be filled and whether physicians tend to dispense free samples as a substitute for prescriptions.

The enclosed short questionnaire should provide relevant information that could effect national health care policy. For example, there are proposals within the Federal Government to eliminate prescription coverage from the Medicaid program altogether. It is essential that we know what happens to indigent (Medicaid) patients in states which currently do not cover prescriptions in their Medicaid program.

We do not want to interfere with your candid responses and therefore assure you that your reply will remain anonymous. Your cooperation will help us and may help you to provide better care for Medicaid patients.

We would, therefore, appreciate it very much if you would complete and return the enclosed, very brief questionnaire by December 1. A stamped return envelope has been provided for this purpose. We would also ask you to write your name on the back of the enclosed stamped postcard and return it separately from the questionnaire. In this way, we will know which physicians have responded without being able to associate any questionnaire with any particular respondent. This will enable us to do a follow up of the nonrespondents in hopes of increasing the number of respondents in the standard survey research manner.

Thank you. I am,

Sincerely yours,

James C. Alden

James C. Alden, M.D.
Assistant Professor
Medicine and Community Medicine
Temple University School of Medicine

JCA/ds
Enclosure

Temple University Study of Physician Reactions to Lack of Coverage of Prescriptions under the Medicaid Program

Background Information

1. Please estimate the percentage of your patients who are covered by the Medicaid (Title XIX) program. (Do not confuse Medicaid with Medicare - Medicare is a Federal Health Insurance Program for the elderly; Medicaid, a public assistance program for the indigent.)

(Please check one)

____ 0 percent
____1-10 percent
____11-25 percent
____26-50 percent
____51-75 percent
____76-100 percent

2. How would you describe your practice?

(Please check one)

____Family Practice
____Internal Medicine
____Pediatrics
____Obstetrics/Gynecology
____General Surgery
____Other (Please specify)

3. Into which of the following categories, does your practice fall?

____Solo practice
____Single specialty partnership or association
____Multispecialty group practice
____Full-time, salaried community hospital
____Full-time, salaried university medical center
____Other (Please specify)____________________

4. Which of the following best describes your most important current mode of compensation?

____Fees-for service
____Salary
____Income sharing from a group's revenue
____Other (Please specify)
____
____
____

5. Please roughly estimate the percentage of your professional time you spend in the following activities?

Patient Care ____%
Teaching ____%
Research ____%
Administration ____%
(of an institution or department, not your own paper work) ____%
Other (please specify)
____
____________________ ____%

6. Please write in the county in which you practice____________________

Substantive Questions

1. What percentage of your Medicaid patients would you estimate have been unable to fill your prescriptions because of a lack of money and no Medicaid coverage of prescriptions?

_____%

_____Cannot make such an estimate
Please tell us why____

____

2. Upon what source of information is this estimate based? (Check all that apply.)

____Complaints of the eligibles themselves
____Conversations that you may have had with local pharmacists
____Other (please specify)______________________________

____

3. Given the situation where you either know or suspect that a particular Medicaid patient is unable to fill your prescriptions because of a lack of money and no Medicaid coverage of prescriptions, how often do you react in each of the following manners? Please check the appropriate percentage intervals for each alternative.

No longer issue him prescriptions ____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Give him free samples ____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Recommend cheaper non-prescription medicines
____0%____1 -10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Hospitalize the patient in order to obtain the necessary medicines
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Have him visit your office more frequently so that you can give him the necessary medication through an injection
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Other (please specify) ______________________________
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

4. Do your patients who have been unable to fill their prescriptions

	YES	NO
Have more frequent hospitalizations?	___	___
Require more visits to your office?	___	___
Consume more of your time due to this problem than other patients?	___	___

5. Have you cut down on the number of Medicaid eligibles that you treat because of the inability to fill your prescriptions?

___Yes

___No

Temple University Study of Physician Reactions to Lack of Coverage of Prescriptions under the Medicaid Program

Background Information

1. Please estimate the percentage of your patients who are covered by the Medicaid (Title XIX) program. (Do not confuse Medicaid with Medicare - Medicare is a Federal Health Insurance Program for the elderly; Medicaid, a public assistance program for the indigent.)

(Please check one)

____ 0 percent
____1-10 percent
____11-25 percent
____26-50 percent
____51-75 percent
____76-100 percent

2. How would you describe your practice?

(Please check one)

____Family Practice
____Internal Medicine
____Pediatrics
____Obstetrics/Gynecology
____General Surgery
____Other (Please specify)

3. Into which of the following categories, does your practice fall?

____Solo practice
____Single specialty partnership or association
____Multispecialty group practice
____Full-time, salaried community hospital
____Full-time, salaried university medical center
____Other (Please specify)________________________________

4. Which of the following best describes your most important current mode of compensation?

____Fees-for service
____Salary
____Income sharing from a group's revenue
____Other (Please specify)
____
____
____

5. Please roughly estimate the percentage of your professional time you spend in the following activities?

Patient Care ____%
Teaching ____%
Research ____%
Administration ____%
(of an institution or department, not your own paper work) ____%
Other (please specify)
____
________________ ____%

6. Please write in the county in which you practice________________

Substantive Questions

1. What percentage of your Medicaid patients would you estimate have been unable to fill your prescriptions because of a lack of money and no Medicaid coverage of prescriptions?

____%

____Cannot make such an estimate
Please tell us why____

____

2. Upon what source of information is this estimate based? (Check all that apply.)

____Complaints of the eligibles themselves
____Conversations that you may have had with local pharmacists
____Other (please specify)____________________________________

____

3. Given the situation where you either know or suspect that a particular Medicaid patient is unable to fill your prescriptions because of a lack of money and no Medicaid coverage of prescriptions, how often do you react in each of the following manners? Please check the appropriate percentage intervals for each alternative.

No longer issue him prescriptions ____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Give him free samples ____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Recommend cheaper non-prescription medicines
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Hospitalize the patient in order to obtain the necessary medicines
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Have him visit your office more frequently so that you can give him the necessary medication through an injection
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

Other (please specify) ________________________________
____0%____1-10%____11-24%____25-49%
____50-74%____75-89%____90-100%

4. Do your patients who have been unable to fill their prescriptions

	YES	NO
Have more frequent hospitalizations?	___	___
Require more visits to your office?	___	___
Consume more of your time due to this problem than other patients?	___	___

5. Have you cut down on the number of Medicaid eligibles that you treat because of the inability to fill your prescriptions?

___Yes

___No

APPENDIX B--PART I

Response Rates, Main Survey

Chapters 1 and 2 have presented some discussion of the desired sample size and the resulting realizations. This first part of the appendix presents more detailed evidence on these realizations and their associated response rates for the main survey.

The data are based on a September 27, 1973, memorandum from the survey contractor. As such the response rates are conservative in that subsequent work by the survey contractor and the Temple survey staff produced approximately 2 to 4% additional completed interviews in each local area.

Table B-1 presents the disposition of the sample for the prestratification by the field action categories for the Atlanta local area. All values are in terms of welfare cases, and thus two designated cases in the "OAA 74 and under, white" category had "no one at home" for the original attempt at an interview and the subsequent callbacks. The row titled "grand total" indicates that of the 1,250 selected welfare cases (a sampling rate of .036), as of September 27, 1973, 1,210 cases were classified with regard to their field action. Of the indicated 40 unclassified, 25 later became classified as completed interviews.

Using the values of Table B-1, the response rates (the ratio of number of completed interviews to number of "potential interviews") can be calculated. These response rates are not only measures of the success of the survey data collection, but they also serve as a guide to the applicableness of the statistical results. When response rates are relatively low (perhaps 60%), one is much more concerned about the usefulness of the survey results than when the response rates are relatively high (perhaps 85%).

If the potential interviews are simply taken as the sum of the field action categories, 1, 2, 4, 5, 6 and D, then the indicated response rate for the Atlanta local area is 85%. As indicated above, this is a relatively high response rate and suggests that the observed sample results are potentially applicable to the indicated population, the Atlanta local area.

Table B-2 presents the disposition of the sample for the Little Rock local area. The sampling rate was .138 of the population of welfare cases and the response rate is 86%.

Note that "bad addresses" continues to be a relatively major field survey problem and that "ineligible for welfare" becomes an even more pronounced problem in the Little Rock local area. There is a suggestion that the Little Rock public assistance list is less up-to-date than the Atlanta list or that the people are less willing to admit that they are collecting welfare assistance payments.

Table B-3 presents the disposition of the sample for the Oklahoma City local area. The sampling rate was .09 and the response rate is 76%. The survey had very low success in securing completed interviews from respondents of

American Indian heritage. This prestratification category has the lowest response rates (0% to 60%) in the survey. Clearly, additional effort is needed to adequately sample this strata. Bad addresses continued to be a main source of unusable welfare cases. Compared to all other local areas, however, it is highest in Oklahoma City. We were unable to account for the surprisingly high level of bad addresses in Oklahoma City. It is known that the field supervisor was absent for two weeks of National Guard camp midway through the field collection stage. This may also partially account for the fact that the Oklahoma City local area had the lowest response rate of all four local areas. However, it should also be noted that a box of questionnaires sent to the survey contractor's home office burst in shipment and 21 questionnaires were lost. If any of these were completed interviews, the response rate would have increased.

Table B-4 presents the disposition of the sample for the Trenton local area. The sampling rate was .161 and the response rate is 86%. Again, "bad addresses" are the chief source of unusable welfare cases. With the exception of two OAA categories (e.g., white $\leq$ 74 and nonwhite $\geq$ 75), the response rates for the prestratification categories are all 80% or more.

One problem that was mentioned in Chapter 2 and pertains to all four local areas is the cases vs. individual basis of the survey results. As indicated in Chapter 2, the sampling unit was the welfare case whereas all the results in Chapters 3-7 are based on approximately 8,200 individuals rather than the approximately 3,200 cases. This raises the important question of the effect on the statistical inferences of the transformation from cases to individuals and vice-versa.

Two points should be noted. First, the relationship of case to individual is virtually one to one in the AD and OAA categories. Thus all results should be virtually the same whether cases or individuals are used as the inferential unit. Second, the case to individual relationship is about 1 to 3.5 for AFDC in all four local areas, and the resulting proportions for a few selected questions seldom differed by more than 1.5%. If this is true for all other questions (the selected questions were anticipated to produce the maximum difference), then the results based on cases will be very similar to those based on individuals and presented in this study. Certainly the large AFDC sample will tend to support this latter point.

TABLE B-1. DISPOSITION OF THE ATLANTA LOCAL AREA SAMPLE SIZE, PRESTRATIFICATION CATEGORIES BY FIELD ACTION CATEGORIES

Prestratification Category	Field Action Category											
	1	2	3	4	5	6	7	8	9	T	S	D
OAA, 74 and under												
White	2	0	0	2	31	0	3	8	0	46	50	-4
Nonwhite	2	1	0	0	57	0	6	5	6	77	91	-14
Total	4	1	0	2	88	0	9	13	6	123	141	-18
OAA, 75 and over												
White	0	0	0	1	34	0	9	4	2	50	54	-4
Nonwhite	5	0	0	2	47	0	8	2	7	71	87	-16
Total	5	0	0	3	81	0	17	6	9	121	141	-20
AD												
White	1	2	0	1	29	0	11	9	0	53	64	-11
Nonwhite	7	4	2	1	96	0	19	15	5	149	138	11
Total	8	6	2	2	125	0	30	24	5	202	202	0
AFDC, 3 or less												
White	3	1	0	1	21	0	3	21	0	50	58	-8
Nonwhite	0	10	3	4	223	0	9	44	21	314	365	-51
Total	3	11	3	5	244	0	12	65	21	364	423	-59
AFDC, 4 or more												
White	2	1	1	0	21	0	2	10	2	39	36	3
Nonwhite	24	21	6	5	237	0	21	38	9	361	307	54
Total	26	22	7	5	258	0	23	48	11	400	343	57
Grand Total	46	40	12	17	796	0	91	156	52	1210	1250	-40

Code for the Field Action Categories:
1 = no one at home
2 = a respondent not at home
3 = vacant
4 = refusal
5 = completed interview
6 = incomplete interview
7 = other (in hospital, nursing home, jail, not assigned, deceased, etc.)
8 = bad address
9 = ineligible for welfare
T = total of codes 1 through 9
S = original sample
D = difference between original sample and total cases accounted for

TABLE B-2. DISPOSITION OF THE LITTLE ROCK LOCAL AREA SAMPLE SIZE, PRESTRATIFICATION CATEGORIES BY FIELD ACTION CATEGORIES

Prestratification Category	Field Action Category									T	S	D
	1	2	3	4	5	6	7	8	9			
OAA, 74 and under												
White	2	0	1	2	41	0	3	6	9	64	74	-7
Nonwhite	1	0	0	2	51	0	2	5	20	81	88	-7
Unclassified	0	0	0	0	26	0	4	6	14	41	54	-13
Total	3	0	1	4	118	0	9	17	43	186	216	-27
OAA, 75 and over												
White	1	0	2	2	93	0	8	7	24	137	138	-1
Nonwhite	0	1	0	0	78	0	10	9	39	137	137	0
Unclassified	1	0	0	0	14	0	3	3	2	23	22	1
Total	2	1	2	2	185	0	21	19	65	297	297	0
AD												
White	0	0	1	1	34	0	1	3	2	42	45	-3
Nonwhite	0	0	1	0	34	0	4	4	5	48	53	-5
Unclassified	0	0	0	1	24	0	2	5	5	37	41	-4
Total	0	0	2	2	92	0	7	12	12	127	139	-12
AFDC, 3 or less												
White	1	0	0	0	16	0	0	7	4	28	30	-2
Nonwhite	3	0	1	0	95	0	6	13	4	122	143	-21
Unclassified	6	0	4	2	120	0	2	37	10	181	199	-18
Total	10	0	5	2	231	0	8	57	18	331	372	-41
AFDC, 4 or more												
White	0	0	0	1	11	0	0	0	3	15	16	-1
Nonwhite	4	1	1	3	129	0	0	9	3	150	151	-1
Unclassified	4	0	1	0	43	0	1	5	1	55	59	-4
Total	8	1	2	4	183	0	1	14	7	220	226	-6
Grand Total	23	2	12	14	809	0	46	119	124	1161	1250	-89

Code for the Field Action Categories:
1 = no one at home
2 = a respondent not at home
3 = vacant
4 = refusal
5 = completed interview
6 = incomplete interview
7 = other (in hospital, nursing home, jail, not assigned, deceased, etc.)
8 = bad address
9 = ineligible for welfare
T = total of codes 1 through 9

S = original sample
D = difference between original sample and total cases accounted for

TABLE B-3. DISPOSITION OF THE OKLAHOMA CITY LOCAL AREA SAMPLE SIZE, PRESTRATIFICATION CATEGORIES BY FIELD ACTION CATEGORIES

Prestratification Category	Field Action Category 1	2	3	4	5	6	7	8	9	T	S	D
OAA, 74 and under												
White	5	3	3	6	79	3	16	14	1	130	135	-5
American Indian	0	1	0	1	3	0	0	0	0	5	5	0
Other	2	1	4	2	37	0	3	3	0	52	51	1
Unclassified	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	5		9	119	3	19	17	1	187	191	-4
OAA, 75 and over												
White	8	3	7	10	115	1	7	4	2	157	160	-3
American Indian	0	0	0	0	0	0	0	1	1	2	2	0
Other	3	0	0	2	37	0	0	4	0	46	49	-3
Unclassified	0	0	0	0	0	0	2	0	0	2	0	2
Total	11	3	7	12	152	1	9	9	3	207	211	-4
AD												
White	5	1	4	7	84	0	20	38	9	168	184	-16
American Indian	0	0	0	0	4	1	0	2	0	7	8	-1
Other	0	0	0	0	43	0	0	0	0	43	77	-34
Unclassified	0	1	10	2	0	0	5	15	0	33	0	33
Total	5	2	14	9	131	1	25	55	9	251	269	-18
AFDC, 3 or less												
White	7	4	5	9	95	1	13	51	22	207	211	-4
American Indian	1	0	0	0	0	0	1	12	0	14	17	-3
Other	29	4	10	6	88	1	10	34	5	187	209	-22
Unclassified	1	0	1	1	0	0	0	6	0	9	0	9
Total	38	8	16	16	183	2	24	103	27	417	437	-20
AFDC, 4 or more												
White	2	3	1	2	21	0	0	13	4	46	51	-5
American Indian	0	0	0	0	3	0	0	0	0	3	6	-3
Other	3	4	9	1	48	0	2	15	1	83	89	-6
Unclassified	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	7	10	3	72	0	2	28	5	132	146	-14
Grand Total	66	25	54	49	657	7	79	212	45	1194	1254	-60

Code for the Field Action Categories:

1 = no one at home
2 = a respondent not at home
3 = vacant
4 = refusal
5 = completed interview
6 = incomplete interview
7 = other (in hospital, nursing home, jail, not assigned, deceased, etc.)
8 = bad address
9 = ineligible for welfare
T = total of codes 1 through 9
S = original sample
D = difference between original sample and total cases accounted for

TABLE B-4. DISPOSITION OF THE TRENTON LOCAL AREA SAMPLE SIZE, PRESTRATIFICATION CATEGORIES BY FIELD ACTION CATEGORIES

Prestratification Category	Field Action Category											
	1	2	3	4	5	6	7	8	9	T	S	D
OAA, 74 and under												
White	0	0	0	2	11	0	4	3	1	21	34	-13
Nonwhite	2	0	0	1	36	0	6	0	2	47	41	6
Total	2	0	0	3	47	0	10	3	3	68	75	-7
OAA, 75 and over												
White	0	0	0	2	12	0	4	7	0	25	29	-4
Nonwhite	0	0	0	0	3	0	3	4	1	11	25	-14
Other	0	0	0	10	2	0	1	0	1	14	0	14
Total	0	0	0	12	17	0	8	11	2	50	54	-4
AD												
White	3	0	0	4	42	0	12	11	2	74	74	0
Nonwhite	2	0	1	2	79	0	8	6	1	97	99	-2
Other	0	0	0	0	2	0	0	0	0	2	0	2
Unclassified	0	0	0	0	4	0	0	0	0	4	0	4
Total	5	0	1	6	127	0	20	17	3	177	173	4
AFDC, 3 or less												
White	7	3	0	4	114	0	4	38	9	179	187	-8
Nonwhite	20	8	2	15	353	0	10	83	17	508	529	-21
Other	0	0	0	0	1	0	0	0	0	1	0	1
Total	27	11	2	19	468	0	14	121	26	688	716	-28
AFDC, 4 or more												
White	0	0	0	0	27	0	1	6	2	36	40	-4
Nonwhite	8	6	3	5	152	0	1	11	5	191	195	-4
Other	0	0	0	0	7	0	0	0	0	7	0	7
Total	8	6	3	5	186	0	2	17	7	234	235	-1
Grand Total	42	17	6	45	845	0	54	169	41	1217	1253	-36

Code for the Field Action Categories:

1 = no one at home
2 = a respondent not at home
3 = vacant
4 = refusal
5 = completed interview
6 = incomplete interview
7 = other (in hospital, nursing home, jail, not assigned, deceased, etc.)
8 = bad address
9 = ineligible for welfare
T = total of codes 1 through 9
S = original sample
D = difference between original sample and total cases accounted for

APPENDIX B--PART II

Underreporting in the Arkansas E.H.S.D.S. Study

The Arkansas study, Chapter 8, represented an important opportunity to gain considerable information on the rural Medicaid eligibles. It was in this spirit that we committed some resources and effort to "riding" on the E.H.S.D.S. sponsored Arkansas Health Survey.

After receiving and analyzing our portion of the database, we began to suspect some systematic problems with the survey. The major problem appeared to us to be a possible underreporting of Medicaid eligibles, particularly the nonwhite category. Correspondence with the Arkansas Health Statistics Center and subsequent analyses have not fully resolved this problem. We include a January 31, 1974 memo on this problem in order to indicate to the reader the basis for our concern.

January 31, 1974

Underreporting in the Arkansas E.H.S.D.S. Study

A. Analysis of Individuals: Total number of Medicaid eligibles = 511
Source: cards sent to us by AHSC

Total sample size = 12,556
Source: AHSC Technical Report, No. 1

Sample estimate of the proportion of individuals eligible for Medicaid, P = 511/12556 = .0407. Total population = 2,000,000 (state)
Source: U.S. Statistical Abstract, 1971

Total Medicaid eligibles

OAA	57,060
AB	1,671
AD	13,076
AFDC	81,596
	153,403

Source: Recipients of Public Assistance Money Payments and Amounts of Such Payments. U.S. Department of HEW, SRS, June 1973

Actual population proportion of individuals eligible for Medicaid, $P = \frac{153,403}{2,000,000} = .0767$

Comparing the population proportion (.0767) with the sample proportion (.0407), we detect a difference (.0360). This, of course, suggests substantial underreporting (47%). However, it may reflect not so much underreporting as the fact that the sample unit was the household, not individuals. Therefore, we shall attempt to analyze the significance of the underreporting based on households.

B. Analysis of Households:

1. Estimated number of Medicaid households

OAA	50,000
AB	1,600
AD	13,000
AFDC	20,000
TOTAL	84,600

This estimation procedure is based on the above (Part A) figure on total Medicaid eligibles and the ratios of eligibles to households from our study in Little Rock and from the E.H.S.D.S. statewide study. In our study, we had a total of 316 OAA (elderly) eligibles, who lived in a total of 299 households. If this ratio (316/299) is reasonably accurate for the entire state, there would appear to be roughly 50,000 OAA households.

We did not collect data on the AB (blind) population, but it is very doubtful that there are too many households with more than one eligible under the AB program. Therefore, we estimate that the 1671 AB recipients live in 1600 households.

Regarding the AD (disabled) program, we had 106 eligibles in 99 households. Therefore, 13,000 AD households appear to be a good rough estimate.

For the AFDC, we had a total of 1577 individuals and 415 households, roughly 4:1 ratio. Therefore, we estimate there to be roughly 20,000 AFDC households statewide.

Thus, we estimate a total of 84,600 Medicaid households in Arkansas. This yields a slightly less than 2:1 individuals/households ratio, 153403/84,600, which is roughly the ratio obtained in the EHSDS statewide study (511 individuals/ 260 households).

2. Total number of households in Arkansas:

   .0067 (1009) + .01 (4729-1009) = 150,597 + 372,000 = 525,597
   Source: AHSC Technical Report, No. 1

3. Population proportion of Medicaid households,
   P = 84,600/525,597 = .1619

4. Number of households in sample: 4214
   Source: AHSC Technical Report, No. 1

   Number of Medicaid sample households: 260
   Source: cards sent to us by AHSC

5. Sample estimate Medicaid households, $P = \frac{260}{4214} = .0617$

If P = .0617 is roughly accurate, then the estimated number of Medicaid households in Arkansas is (525,597)(.0617) = 32,244. Comparing this result with the total number of individual Medicaid eligibles of 153,403, implies, roughly, 4.75 eligibles per eligible household--a ratio which, in light of the above analysis, seems much too high.

Is it possible that the observed difference between the above population and sample proportions is totally attributable to sampling variability?

What is the probability of getting 260 or fewer Medicaid households, given a sample size of 4214 households and P = .1619?

$\Pr(\bar{X} \leq 260 \mid n = 4214,\ P = .1619)$

$$\mu = nxp = 4214(.1619) = 682 - 25$$

$$\alpha = nxpxq = 4214(.1619)(.8381) = 571.79$$

$$Z = \frac{\bar{X} - \mu}{\alpha} = \frac{260-682.25}{\sqrt{571.79}} = -17.65;$$

$\therefore \Pr(Z \leq -17.65) = 0.0000+$

Thus, the probability that the difference between the population and sample proportions is due to sampling variability is virtually zero.

Let us now construct a 99% confidence interval on the population proportion, P = .1619.

$$\Pr(\hat{P}-Zx_{.005}\sqrt{PQ/n} < P < \hat{P}+Zx_{.005}\sqrt{PQ/n}) = .99$$

$$\Pr(.0617 - 2.57x\sqrt{\frac{(.1619)\ (.8381)}{4214}} < P < .0617 + 2.57x\ \sqrt{\frac{(.1619)(.8381)}{4214}} = .99$$

$\therefore \Pr(.0471 < P < .0763) = .99$

A 99% confidence interval on the number of Medicaid households in Arkansas, then, is found simply by multiplying the upper and lower bounds of the above interval for P by 525,597. The resulting confidence interval ranges from 24,756 to 40,107 Medicaid households.

Therefore, we conclude that there is a very significant amount of underreporting. Furthermore, as indicated earlier, there was a substantial underreporting of blacks. Since there is a disproportionately large number of blacks eligible for Medicaid, it is, therefore, not surprising that there was also an underrepresentation of Medicaid eligible households.

/s/ John A. Flueck, Ph.D.
William F. McKenna, M.B.A.

APPENDIX C

Significance Testing

Introduction

The study has utilized significance testing, as opposed to hypothesis testing, throughout in presenting results of the analyses. This appendix is aimed at providing background information on what is a significance test, how it differs from a test of a hypothesis, and how one calculates it. Further information on this topic can be found in Kempthorne and Folks [1].

Significance testing appears to have made its initial appearance in the early 1700's, but the full development waited until the work of K. Pearson and R. Fisher in the early 1900s. Significance testing attempts to quantitatively present the "strength" of evidence present in a set of data (database) for a given model (null hypothesis) or class of models through the use of a probability statement. No attempt is made to go the further step and render a formal decision on the possible truth or falsity of the model.

Hypothesis testing, however, formally concerns itself with the truth or falsity of a hypothesis, or model, through the accept-reject decision rule. After the two competing states of the world have been specified (null and alternative hypotheses) and all uncertainties have been neatly packaged, the data are selected, applied to the decision rule, and a decision is rendered on the truth of the null hypothesis. Rejection of the null hypothesis implies acceptance of the alternative and vice versa. J. Neyman and E. Pearson have been the founding fathers of hypothesis testing.

Some proponents of hypothesis testing have argued that philosophically this testing procedure can only assert the falsity of the null hypothesis. They argue that a decision to accept the null hypothesis can only be logically interpreted as a failure to presently find sufficient evidence for its rejection. This "modification" of hypothesis testing is somewhat ambiguous in that the rejection of the null hypothesis (asserted falsity) philosophically cannot allow one to assert the truth of the alternative. Thus the role of the two hypotheses is no longer clear and the application of hypothesis testing becomes misty.

The data analysis approach taken in this study has viewed all models as being somewhat incorrect, but still useful in aiding the social scientist to understand the phenomenon of interest. As such, models are used as a tool of analysis, as well as a partial description of reality, with the final judgment of their success left to the reader. Consequently, significance testing is used to aid the reader in assessing the presented evidence.

Calculation

Significance testing consists of the following elements: (1) the designation of a specified class of models (often termed the null hypothesis) and an alternative class (often termed the alternative hypothesis); (2) the selection of a test statistic T which is simply a function of the observations ($x_1, \ldots, x_n$); and (3) the calculation of the significance level, which is simply the probability of T taking a more extreme value than the observed value t_o given the specified class of models (SCM).

Thus the significance level, $\Pr[T \geq t_o | \mathrm{SCM}]$, is a probability statement which quantifies the strength that the assembled observations present in support of the specified class of models.

The smaller the probability value the less likely that the observed value of the test statistic, t_o, has occurred by chance, i.e. due to sampling variability, given the specified class of models. Consequently, relatively small significance levels are generally interpreted in this study as strong evidence that the observed differences are attributable to underlying causes and not to sampling variability. The value of the significance level is often termed the P value and this study has adopted this convention.

To acquaint the reader with the calculation of the P value, the following example is presented.

1. The specified model is that

$P_1 - P_2 = 0$ i.e., the two population proportions are identical,

and the alternative model is that

$P_1 - P_2 \neq 0$ i.e., that the population proportions are not identical

2. The sample data ($x_1, x_2, \ldots, x_n$) and ($y_1, y_2, \ldots, y_m$) are both

statistically independent and produce two sample proportions,

$$p_1 = \sum_{i=1}^{n} x_i/n \text{ and } p_2 = \sum_{i=1}^{m} y_i/m$$

where x_i and y_i take on the values 1 if the characteristic of interest is present; 0 if the characteristic of interest is not present

The question now arises as to how one can assess the strength of the evidence given by $p_1 - p_2$, the difference of the two sample proportions.

The answer is to compare the observed sample difference in proportions, $p_1 - p_2$, with an estimate of variability, after adjusting for the presumed difference in the population proportions, $P_1 - P_2$. In short, the test statistic T is

$$T = \frac{(p_1 - p_2) - (P_1 - P_2)}{\sqrt{\mathrm{var}_{pd}(p_1 - p_2)}}$$

where $\mathrm{var}_{pd}(p_1-p_2)$ is the pooled variance under the specified class of models.

Thus,

$$\mathrm{var}_{pd}(p_1-p_2) = p^*(1-p^*)(1/n + 1/m)$$

$$\text{where: } p^* = (\Sigma x_i + \Sigma y_i)/n+m$$

Now T is presumed to be approximately distributed as the standardized normal distribution, and consequently the significance level is calculated using the standardized normal distribution.

As an example, if $p_1=.60$, $n=20$, $p_2=.50$, and $m=40$, then

$$p^* = \frac{20(.60)+40(.50)}{20 + 40} = .366$$

$$\mathrm{var}_{pd}(p_1-p_2)=(.366)(1-.634)(1/20 + 1/40) = .0174$$

$$\text{and} \quad t_o = \frac{(.60-.50)-0}{\sqrt{.0174}} = .76$$

Thus, the one tailed significance level will be

$$\Pr[T \geq .76 | P_1=P_2] = \Pr[U \geq .76 | N(0,1)] = .2236$$

A two tailed significance level would simply double the value, i.e. $2(.2236) = .4472$.

Where more than two sample proportions are being compared, the statistic T is based on the Pearson "Goodness of Fit Test" and is approximately Chi-Square distributed. Thus, the P value is based on the hypothesis of statistical independence between two qualitative variables and hence is evidence for the strength of this assumption.

Reference

[1] Kempthorne, O. and Folks, L., _Probability, Statistics, and Data Analysis_. Iowa State Press, Ames, Iowa, 1971.

APPENDIX D

Reliability Study

In the interest of providing evidence on the quality of the survey data, a reliability study was conducted on the main survey. The method utilized was in each local area to reinterview a subsample (10%) of the completed interviews using ten preselected questions from the questionnaire. The subsample was to be systematically selected by taking every tenth completed interview.

The reinterview was to be conducted with the original respondent, if available, by a personal visit or telephone call and was generally completed within two weeks of the original interview. For the OAA and AD cases, only the listed welfare recipient was reinterviewed. For the AFDC cases, information on the recipient and the second youngest child (or only child, where applicable) was solicited. In addition, where provided, one or two other children were also included in the study.

Table D. 1 presents the sample sizes (measured in welfare cases) by local area and program for the main survey and the reliability study. The corresponding sample sizes suggest that the execution of the reliability was not properly followed, particularly in Oklahoma City (OAA and AD) and in Trenton (OAA and AD, AFDC). For Oklahoma City, part of the discrepancy may be due to a box of questionnaires that burst in shipment and lost 21 questionnaires.

Given the above situation, it was necessary to check to see if the combined reliability sample still adequately represented the various subpopulations of the survey. The comparisons of percentages from the reliability sample with the main survey sample for race, sex of respondent, age for OAA, and family size for AFDC produced adequate agreement, with the largest difference being only 5%. Thus, on the basis of these demographic comparisons, the reliability sample seems representative of the main survey sample.

Table D. 2 presents further background information on the reliability sample. As the table indicates, most of the reinterviews were by telephone (79%) and either within 6 days (41%) or more than 10 days (42%) after the original interview. The average time between the original interview and the reinterview was less than two weeks (12.88 days).

The results of the reliability study for all four local areas and all reinterviewed individuals are presented in Table D. 3. For each of the ten questions the answer given on the reliability study was matched with the answer given in the main survey and if the two answers were identical a "concordance" was scored. If they differed a "discordance" was scored, and if either had missing values, or the question did not apply, the match was scored as "other". In switching from cases to individuals, there are now 468 observations (261 individuals + 207 AFDC children) for each question.

As the adjusted values in Table D-3 indicate, the reliability of the examined questions was generally good. The questions having strongest reliability were generally the factual (e.g., sex, Medicaid eligibility, etc.) and traumatic event (e.g. ever been in a nursing home) questions. Alternatively, the questions with relatively less reliability tended to be those of a more subjective nature (e.g. where do you usually see the doctor) or of a longer recall period (i.e. last visit to eye doctor, pregnant in last five years, etc.).

Table D-4, and its eight subtables, present the reliability results for each question and the weighted average over all questions for the eight (4.1 - 4.8) cross-classifications of local areas, observed race of recipient, welfare program, sex of interviewee, type of reinterview, sex of interviewer, time between original interview and reinterview, and average time of interview per individual in the case.

The local area cross-classification (D-4.1) indicates that over all questions of the reliability study, Trenton had the lowest reliability score (83%) and Oklahoma City the highest (94%) and these two values are strongly different. In addition, questions 1, 6, 7, and 10 had differences in their reliability scores between the four local areas that had only a 1% or less chance of occurring due to sampling variability. The suggestion is that these questions provided much of the difference in reliability scores between the four local areas.

The second cross-classification, observed race of recipient (D-4.2) does not show much difference in reliability scores between the two major subpopulations, white and black. The American Indians were too few to place much reliance on their observed scores. The same situation, not much difference between subpopulations, holds for the third cross-classification, welfare program. Although some questions (e.g. 3, 7, and 9) appear to have substantial differences in reliability scores, the overall picture is one of no differences attributable to sex of the interviewee (D-4.4).

The fifth cross-classification, type of reinterview (D-4.5), indicates that telephone and household reinterviews are very similar in the reliability study. The telephone has a higher reliability score in 6 of 11 questions, but the overall weighted average favors household interviews slightly. Apparently for short questionnaires, telephone interviews, presuming no contact problem, are about as good as household interviews.

The sixth cross-classification, sex of the interviewer, suggests that overall, the female interviewers tend to produce more reliable results than the males. However, the reliability scores for females are only higher than males on five questions. There is a suggestion that female interviewers are more successful on the "threatening" questions than the males.

The reliability results for the time between the interview of the main study and the reinterview of the reliability study, (D-4.7) suggest that reliability is not an inverse function of time for the given interval. In fact, the reliability score is higher for the > 10 days subpopulation than for the < 6 days subpopulation. However, these differences are not very strongly supported.

Lastly, the average time of interview (D-4.8) cross-classification does seem to provide evidence that length of interview is related to reliability. Longer interviews seem to produce less reliability, on the average, than shorter interviews. This is consistent with other known survey research results.

TABLE D-1. NUMBER OF WELFARE CASES IN THE MAIN SURVEY AND THE RELIABILITY STUDY

Local Area	Program	Main Survey		Reliability Study	
1. Atlanta	OAA and AD	284		34	
	AFDC	537	821	59	93
2. Little Rock	OAA and AD	399		39	
	AFDC	424	823	51	90
3. Oklahoma City	OAA and AD	425		21	
	AFDC	262	687	24	45
4. Trenton	OAA and AD	195		10	
	AFDC	668	863	23	33
	TOTAL		3,194		261

TABLE D-2.1. DISTRIBUTION OF CASES ACCORDING TO TYPE OF REINTERVIEW

City	Personal Reinterview Abs. Freq.	Personal Reinterview Rel. Freq.	By Telephone Abs. Freq.	By Telephone Rel. Freq.	Unknown Abs. Freq.	Unknown Rel. Freq.	Total Freq.
Atlanta	25	26.9	65	69.9	3	3.2	93
Little Rock	15	16.7	71	78.9	4	4.4	90
Oklahoma City	1	2.2	41	91.1	3	6.7	45
Trenton	4	12.1	28	84.8	1	3.0	33
TOTAL	45	17.2	205	78.5	11	4.2	261

TABLE D-2.2. DISTRIBUTION OF CASES ACCORDING TO TIME BETWEEN INTERVIEW AND REINTERVIEW

City	Less than 6 days Abs. Freq.	Less than 6 days Rel. Freq.	6 to 10 days Abs. Freq.	6 to 10 days Rel. Freq.	More than 10 days Abs. Freq.	More than 10 days Rel. Freq.	Total Freq.
Atlanta	35	37.6	17	18.3	41	44.1	93
Little Rock	13	14.4	16	17.8	61	67.8	90
Oklahoma City	34	75.6	7	15.6	4	8.9	45
Trenton	26	78.8	3	9.1	4	12.1	33
TOTAL	108	41.4	43	16.5	110	42.1	261

TABLE D-3. PERCENT AND NUMBER OF CONCORDANT, DISCORDANT AND OTHER ANSWERS FOR ALL FOUR LOCAL AREAS COMBINED

Questions	Concordance	Discordance	Other	Adjusted* Concordance	Adjusted* Discordance
1. Age	92.1 (431)	7.7 (36)	0.2 (1)	92.3	7.7
2. Sex	94.0 (440)	2.4 (11)	3.6 (17)	97.6	2.4
3. Medical eligibility	53.4 (250)	1.7 (8)	44.9 (210)	96.9	3.1
4. Ever been in nursing home	52.8 (247)	2.3 (11)	44.9 (210)	95.7	4.3
5. Last time in nursing home					
Month	54.6 (256)	0.7 (3)	44.7 (209)	98.8	1.2
Year	54.9 (257)	0.7 (3)	44.4 (208)	98.8	1.2
6. Regularly see dentist	89.3 (418)	9.2 (43)	1.5 (7)	90.7	9.3
7. Last visit to eye doctor	76.1 (356)	22.4 (105)	1.5 (7)	77.2	22.8
8. Chronic health problem	56.6 (265)	4.3 (20)	39.1 (183)	93.0	7.0
9. Where usually see doctor	80.3 (376)	17.9 (84)	1.7 (8)	81.7	18.3
10. Pregnant in last 5 years	66.7 (312)	9.2 (43)	24.1 (113)	87.9	12.1

*Computed by omitting "other" values.

TABLE D-4. PERCENTAGE OF CONCORDANCE FOR EACH QUESTION AND THE WEIGHTED AVERAGE OVER ALL QUESTIONS FOR A NUMBER OF SUBPOPULATIONS

	Question											
Variable	1 (467)[a]	2 (451)	3 (258)	4 (258)	5a (259)	5b (260)	6 (461)	7 (461)	8 (285)	9 (460)	10 (355)	Weighted Average
D-4.1 Local Area**												
Atlanta	85.1	97.4	96.7	96.7	97.8	97.8	88.7**	69.5**	95.2	80.4	74.3**	86.4±1.0[b]
Little Rock	97.9	98.6	94.4	95.6	100.0	100.0	95.0	81.3	94.9	83.5	97.0	93.1±0.8
Oklahoma City	97.9	97.9	100.0	91.1	97.7	97.8	96.8	93.8	90.0	84.2	95.6	94.3±0.9
Trenton	89.7	94.8	100.0	100.0	100.0	100.0	75.9	62.7	87.8	77.6	71.4	83.4±1.9
D-4.2. Observed Race of Recipient												
White	93.4	95.9	97.4	94.8	98.7	98.7	91.7	78.2	90.1	88.3	91.6	91.1±1.1
Black	91.2	98.0	97.0	96.4	98.8	98.8	89.5	75.6	93.7	79.3	84.7	88.7±0.7
American Indian	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	--	100.0	100.0	99.5±0.0
Unknown	100.0	100.0	93.3	93.3	100.0	100.0	100.0	92.0	100.0	80.0	100.0	95.8±1.1
D-4.3. Welfare Program												
OAA, 74 or under	93.1	96.6	100.0	96.3	96.4	96.4	100.0	83.8	91.3	89.7	100.0	93.9±2.0
75 or over	97.1	100.0	100.0	100.0	97.1	100.0	97.1	80.0	95.2	82.9	100.0	94.0±1.1
AD	88.4	95.3	95.2	97.6	100.0	97.6	92.9	66.7	93.8	73.8	83.9	88.0±1.8
AFDC, 3 or less	90.4	98.9	97.7	93.2	98.9	98.9	87.2	80.6	89.6	79.6	85.8	88.8±0.9
4 or more	94.2	96.3	94.0	95.5	100.0	100.0	91.1	74.6	96.8	84.5	87.4	89.6±1.0
D-4.4. Interviewee Sex												
Male	94.4	100.0	89.8**	93.8	100.0	100.0	91.5	82.4*	94.8	75.9*	88.3	89.9±1.0
Female	91.4	96.5	98.6	96.2	98.6	98.6	90.3	74.9	92.3	84.3	87.7	89.7±0.7
D-4.5. Type of Reinterview												
Household	95.0	95.0	97.7	97.7	97.7	97.7	90.0	82.5	92.0	88.7	86.3	91.1±1.2
By telephone	91.6	98.0	96.6	95.6	99.0	99.0	91.4	76.4	93.0	80.5	88.3	89.5±0.7
Unknown	94.1	100.0	100.0	90.9	100.0	100.0	88.2	70.6	100.0	75.0	85.7	87.6±1.1

TABLE D-4. Continued

	Question											
	1	2	3	4	5a	5b	6	7	8	9	10	Weighted
Variable	(467)[a]	(451)	(258)	(258)	(259)	(260)	(461)	(461)	(285)	(460)	(355)	Average
D-4.6. Interviewer Sex												
Male	86.7**	97.5	96.9	96.9	99.0	99.0	86.0*	67.8**	93.1	81.2	82.9*	86.8±1.1
Female	95.4	98.1	96.5	94.3	98.6	98.6	94.2	82.9	92.6	80.9	89.3	91.3±0.7
Unknown	97.0	93.9	100.0	100.0	100.0	100.0	87.9	81.8	95.5	90.9	100.0	93.0±1.9
D-4.7. Time between Interview and Reinterview												
Less than 6 days	89.8	96.9	99.1	94.4	97.2	97.2	89.1	75.4	88.5*	80.4	86.4	88.3±0.9
6 to 10 days	92.4	100.0	95.2	100.0	100.0	100.0	93.7	77.2	97.7	88.5	85.0	91.2±1.3
More than 10 days	94.8	97.3	95.4	95.3	100.0	100.0	91.0	79.1	96.4	80.3	90.8	90.5±0.9
D-4.8. Average Time of Interview per Individual in the Case												
Less than 10 minutes	97.2*	97.1	95.0	98.4	100.0	100.0	95.1	81.3	98.7*	91.6**	92.2	93.3±0.8
10 to 25 minutes	89.6	97.5	96.2	92.3	99.0	99.0	87.4	76.7	89.7	74.9	85.3	87.2±1.0
More than 25 minutes	90.9	98.2	98.9	97.8	97.8	97.9	91.0	73.0	92.5	81.8	87.0	89.9±1.0
Mean	92.3	97.6	96.9	95.7	98.8	98.8	90.7	77.2	93.0	81.7	87.9	89.7±0.6

Notes: [a] The number of individuals who submitted an answer that was classified as concordant or discordant.

[b] Standard deviation of the weighted mean.

*Probability of there not being a difference between the subpopulations is ≤.05.

**Probability of there not being a difference between the subpopulations is ≤.01.

APPENDIX E

The Validity Study

The goal of the validity study was to begin to assess the accuracy of the collected data. If the data are found to be of "high quality" (reasonably accurate), then, other things being sufficient, strong confidence can be placed in the estimates and other statistical results.

Considerable "eye-balling" was undertaken of the sample proportions that resulted from the cross-tabulations of the survey database for the main and auxiliary studies. For the main survey, comparisons were made both within the survey and with other relevant, published survey results. The feeling was that the data looked quite consistent both internally and externally.

A further check on these views was available through a brief study of the "paid-claims tapes" secured from three of the local areas surveyed (Atlanta did not provide their tapes even though initially agreeing to do so). This validity study simply entailed the comparison of an interviewee's response on the household survey with a state welfare record of the service provided to the interviewee, the paid-claims tape, for the same time period.

A note of caution should be given with regard to the paid-claims tapes. It has been suggested by a number of researchers and government agencies that the quality of the tapes is highly variable from state to state as well as from city to city within the same state. In addition, a provider may submit his claim many months after the service has been performed (if he submits it at all) and thereby make the matching of record with response even more difficult. Thus, the results of the subsequent matching of interview responses with paid-claims tape records must be viewed with some caution.

Exactly 80 cases (approximately 10% of the completed sample) were randomly selected for validation in each of the four survey sites. Atlanta, as previously mentioned, did not cooperate in supplying the needed records (paid-claims tapes) and, thus, only 240 cases (questionnaires) were eligible for validation. However, 25 of these questionnaires were not located in the initial search of the over 3000 questionnaires, and time and manpower constraints precluded a second search. Although 215 questionnaires were located for the validity study, only 213 had paid-claims tape records and were used in the validity study. Table E-1 presents the distribution of the cases and the total number of validated individuals by local area.

TABLE E-1. NUMBER OF CASES AND INDIVIDUALS IN THE VALIDITY STUDY

	Little Rock	Oklahoma City	Trenton	Total
Cases	76	65	72	213
Individuals	76	71	128	275

In Little Rock, only the respondents' answers were validated. In Oklahoma City, the respondents' answers and, in every fifth case, the answer of an additional member of the family (where available) were validated. Lastly, in Trenton, the respondents and a randomly selected child's answers (where available) were validated. These procedures produced the number of validated individuals presented in the second row of Table E-1. As can be seen, there was a total of 275 individuals validated by this study.

In order to check on the representativeness of the validity sample, some demographic and health care utilization values were compared for the validity sample and the main study sample (Table E. 2). Although there is some difference in demographic characteristics, the utilization values are similar.

Initially, at least one question from each of the sections of the questionnaire was to be validated. However, as the validation study was mounted, time and manpower constraints led to a less ambitious target, and only six questions from four sections were finally validated. In Little Rock and Oklahoma City, only questions pertaining to the covered opitonal services could be validated, because uncovered services were not listed on the paid-claims tapes. Also, if a respondent indicated that a covered service was paid for by some means other than Medicaid, it could not be properly validated either.

Table E-3 presents the validation results for the six questions in terms of percent of interview answers that were matched by the paid-claims tape records. A match was declared if the household interview value was the same as the paid-claims record.

For all services with the exception of physician visits, it can be seen that a rather high level of validation (85%-94%) was demonstrated - including fairly consistent results across local areas. Further cross-tabulation indicated that the relatively low validation of physicians' visits was partly due to the fact that as the number of times a service was utilized increased, the proportion of valid responses decreased. This was largely true for all sub-populations in the study. Also, as might be anticipated, physician visits were over-reported in that people reported seeing a physician more often than the records indicated.

The interview data in the validity study were also analyzed as attribute data with the two categories of "service not utilized" and "service utilized at least once". This transformation of the response variable is appropriate for the utilization estimates (i.e., proportion of the eligibles who utilized a service). Table E-4 presents these results.

For the first five questions the results are similar to those in Table E-3, with some increase in validity. However, question 6, physician visits, shows the biggest improvement with the percent of valid response now at about 79%. Needless to say, the attribute validity results of Table E-4 look encouraging, with the implication that the utilization results in the main study are based on rather high quality data.

TABLE E-2. COMPARISON OF MAIN STUDY SAMPLE OF INDIVIDUALS WITH VALIDITY STUDY SAMPLE (BY SELECTED CHARACTERISTICS)

		Percentage	
		Main Study	Validity Study
a. Residence:	Little Rock	33	28
	Oklahoma City	23	26
	Trenton	44	46
b. Racial mix:	white	26	38
	nonwhite	74	62
c. Assistance category:	AD	7	12
	OAA	12	22
	AFDC	81	66
d. Hospitalized in 1973		12	16
e. Hospitalized in 1972		17	16
f. Saw dentist in 1973		19	14
g. Obtained glasses in 1973		17	22
h. Saw eye doctor in 1973		12	9
i. Saw physician in 1973		54	59

TABLE E-3. PERCENT OF INTERVIEW ANSWERS THAT MATCHED WITH PAID CLAIMS TAPE RECORDS

	Local Area			
	Trenton	Little Rock	Oklahoma City	Total
1. 1972 hospital admits	92	91	87	90
2. 1973 hospital admits	93	93	93	93
3. Visits to a dentist	87	88	--	88
4. Visits to an eye doctor	94	--	--	94
5. Glasses obtained	85	--	--	85
6. Physician visits	49	62	42	49

TABLE E-4. PERCENT OF INTERVIEW ATTRIBUTE ANSWERS THAT MATCHED WITH PAID CLAIMS TAPE ATTRIBUTE RECORDS

	Local Area			
	Trenton	Little Rock	Oklahoma City	Total
1. 1972 hospital admits	94	92	92	93
2. 1973 hospital admits	95	94	94	95
3. Visits to a dentist	89	91	--	90
4. Visits to an eye doctor	94	--	--	94
5. Glasses obtained	89	--	--	89
6. Physician visits	81	79	75	79

CMS LIBRARY
3 8095 00005141 3